# CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, April 4, 1907.

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## CONSTRUCTION NEWS.

### PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S.) and Bidding Sheets (B. S.) may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

| Bids close. | Work. | Place. | On file. | See issue |
|---|---|---|---|---|
| Apr | | | | |
| *13 | Buildings | Fort Hancock, N. J. | P. & S. | 3-21 |
| *15 | Cement | Montrose, Colo. | S. & B. S. | 3-14 |
| 20 | Locomotive jib crane | Philadelphia, Pa. | S. | 3-28 |
| 25 | Bridges | Glendive, Mont. | P., S. & B. S. | 3-21 |
| 27 | Pattern shop | Portsmouth, N. H. | S. | 4-4 |

*Work advertised in Engineering News.

### LIST OF CONTRACTS PENDING.

#### LIGHT, HEAT AND POWER PLANTS.

| Bids close. | Work. | Place. | On file. | See issue |
|---|---|---|---|---|
| Apr. 4 | Conduit system | Macon, Ga. | | Mar. 14 |
| | Advertised, Eng. News, Mar. 14 and 21. | | | |
| Apr. 5 | Boilers, etc. | Indianapolis, Ind. | | Mar. 21 |
| Apr. 5 | Lighting | Fort Erie, Ont. | | Mar. 28 |
| Apr. 8 | Lighting system | Clifton Forge, Va. | | Mar. 14 |
| Apr. 8 | Street lighting | East Orange, N. J. | | Apr. 4 |
| | Advertised, Eng. News, Apr. 4. | | | |
| Apr. 10 | Conduits | New York, N. Y. | | Apr. 4 |
| Apr. 15 | Lighting system | Battleford, Sask. | | Mar. 21 |
| Apr. 15 | Power plant | Bowling Green, Ky. | | Mar. 7 |
| Apr. 29 | Heating apparatus | Macon, Ga. | | Mar. 28 |
| | Advertised, Eng. News, Mar. 28 and Apr. 4. | | | |
| Apr. 30 | Conduit system | Seattle, Wash. | | Mar. 21 |
| May 1 | Lighting | Natchez, Miss. | | Mar. 7 |
| | Advertised, Eng. News, Mar. 7 and 14. | | | |
| May 20 | Equipment | Los Angeles, Cal. | | Mar. 28 |
| | Advertised, Eng. News, Mar. 28 to Apr. 18. | | | |

#### BRIDGES.

| | | | | |
|---|---|---|---|---|
| Apr. 4 | Viaduct | Jersey City, N. J. | | Mar. 28 |
| Apr. 4 | Bridge | Prosser, Wash. | | Mar. 28 |
| Apr. 5 | Bridges | Mitchell, S. Dak. | | Mar. 21 |
| Apr. 5 | Bridge | Ft. Dodge, Iowa | | Apr. 4 |
| Apr. 6 | Abutments | Cleveland, Ohio | | Mar. 21 |
| Apr. 6 | Bridges | Bryan, Ohio | | Mar. 28 |
| Apr. 8 | Substructure | Salem, Ohio | | Mar. 28 |
| Apr. 8 | Bridge | Ft. Worth, Tex. | | Mar. 28 |
| Apr. 8 | Bridge | Shelley, Idaho | | Mar. 28 |
| Apr. 8 | Bridge, etc. | South Bend, Ind. | | Mar. 21 |
| Apr. 8 | Trestles, etc. | Louisville, Ky. | | Mar. 14 |
| | Advertised, Eng. News, Mar. 14 to Apr. 4. | | | |
| Apr. 8 | Superstructure | Fredericton, N. B. | | Apr. 4 |
| Apr. 9 | Bridge | Duluth, Minn. | | Mar. 21 |
| Apr. 10 | Bridge, etc. | Willowdale, Ont. | | Apr. 4 |
| Apr. 10 | Bridge, etc. | Ft. Wayne, Ind. | | Mar. 28 |
| Apr. 11 | Bridge | Greensburg, Ind. | | Mar. 28 |
| Apr. 11 | Repairing bridge | Somerfield, Pa. | | Mar. 28 |
| Apr. 11 | Bridges | Wenatchee, Wash. | | Mar. 28 |
| Apr. 11 | Arch | Granville, Ohio | | Mar. 21 |
| Apr. 13 | Bridges | Cleveland, Ohio | | Mar. 28 |
| Apr. 14 | Bridges | Kokomo, Ind. | | Apr. 4 |
| Apr. 15 | Bridge | Minneapolis, Minn. | | Apr. 4 |
| Apr. 15 | Bridge, etc. | Crookston, Minn. | | Apr. 4 |
| Apr. 15 | Bridge | Denver, Colo. | | Mar. 21 |
| | Advertised, Eng. News, Mar. 21. | | | |
| Apr. 23 | Bridges | Beatrice, Neb. | | Apr. 4 |
| Apr. 25 | Bridges | Glendive, Mont. | | Apr. 4 |
| Apr. 25 | Bridges | Glendive, Mont. | | Mar. 14 |
| | Advertised, Eng. News, Mar. 14 to Apr. 4. | | | |
| Apr. 29 | Viaduct | New Orleans, La. | | Feb. 28 |
| | Advertised, Eng. News, Feb. 28 to Apr. 11. | | | |

#### BUILDINGS.

| | | | | |
|---|---|---|---|---|
| Apr. 4 | Filing cases, etc. | New York, N. Y. | | Mar. 14 |
| | Advertised, Eng. News, Mar. 14 and 21. | | | |
| Apr. 5 | Hotel | Lexington, Ky. | | Mar. 28 |
| Apr. 7 | Repairs | Fort Morgan, Ala. | | Apr. 4 |
| | Advertised, Eng. News, Apr. 4 and 11. | | | |
| Apr. 8 | Heating, etc. | New York, N. Y. | | Apr. 4 |
| Apr. 8 | Post-office | Denver, Colo. | | Mar. 7 |
| Apr. 9 | Post-office | Little Falls, N. Y. | | Mar. 7 |
| | Advertised, Eng. News, Mar. 7 and 14. | | | |
| Apr. 9 | Court-house | Carthage, Ill. | | Feb. 28 |
| Apr. 10 | Elevator | Superior, Wis. | | Mar. 21 |
| Apr. 10 | Church | Philadelphia, Pa. | | Apr. 4 |
| Apr. 11 | Interior finish | New York, N. Y. | | Mar. 14 |
| Apr. 12 | Repairs | Washington, D. C. | | Mar. 14 |
| Apr. 13 | Buildings | Fort Hancock, N. J. | | Mar. 14 |
| | Advertised, Eng. News, Mar. 14 to Apr. 4. | | | |
| Apr. 15 | Post-office | Tyler, Tex. | | Mar. 7 |
| | Advertised, Eng. News, Mar. 7 and 14. | | | |
| Apr. 15 | Marble work | West Point, N. Y. | | Mar. 21 |
| | Advertised, Eng. News, Mar. 21 to Apr. 11. | | | |
| Apr. 15 | Factories | Chattanooga, Tenn. | | Apr. 4 |
| Apr. 16 | Hospital | New York, N. Y. | | Apr. 4 |
| Apr. 18 | Post-office | Flint, Mich. | | Mar. 21 |
| Apr. 22 | Stairs | West Point, N. Y. | | Apr. 4 |
| | Advertised, Eng. News, Apr. 4 to 18. | | | |
| Apr. 22 | Plans | Sacramento, Cal. | | Apr. 4 |
| Apr. 24 | Plumbing, etc. | West Point, N. Y. | | Apr. 4 |
| | Advertised, Eng. News, Apr. 4 to 18. | | | |
| Apr. 27 | Pattern shop | Portsmouth, N. H. | | Apr. 4 |
| May 1 | Plans | Milwaukee, Wis. | | Feb. 28 |
| May 1 | Buildings | North Chicago, Ill. | | Mar. 14 |
| May 2 | Marble work | Burlington, Vt. | | Apr. 4 |
| | Advertised, Eng. News, Apr. 4 and 11. | | | |
| May 6 | Post-office | Trenton, N. J. | | Apr. 4 |
| May 7 | Post-office | Lafayette, Ind. | | Apr. 4 |
| | Advertised, Eng. News, Apr. 4 and 11. | | | |
| May 15 | Post-office | Denver, Colo. | | Apr. 4 |
| June 4 | State Capitol | Pierre, S. Dak. | | Mar. 7 |

#### WATER SUPPLY AND IRRIGATION.

| | | | | |
|---|---|---|---|---|
| Apr. 4 | Ditches, etc. | Emmetsburg, Iowa | | Mar. 7 |
| Apr. 4 | Filtration plant | Yonkers, N. Y. | | Mar. 14 |
| | Advertised, Eng. News, Mar. 14. | | | |
| Apr. 4 | Ditch and laterals | Albert Lea, Minn. | | Mar. 14 |
| | Advertised, Eng. News, Mar. 14 and 21. | | | |
| Apr. 4 | Water-works | Austin, Pa. | | Mar. 21 |
| | Advertised, Eng. News, Mar. 21. | | | |
| Apr. 5 | Ditch | Oskaloosa, Iowa | | Mar. 21 |
| Apr. 5 | Water mains | Solon, Iowa | | Mar. 28 |
| Apr. 8 | Machinery | Victoria, B. C. | | Apr. 4 |
| Apr. 9 | Water-works | Leesburg, Ohio | | Apr. 4 |
| Apr. 9 | Water-works | Wilmont, Minn. | | Mar. 28 |
| Apr. 10 | Wells, etc. | New York, N. Y. | | Mar. 28 |
| Apr. 10 | Pipe and special castings | Portland, Ore. | | Mar. 28 |
| Apr. 10 | Canal, etc. | Wheatland, Wyo. | | Mar. 21 |
| Apr. 10 | Filter plant | Atlanta, Ga. | | Mar. 21 |
| Apr. 10 | Cast-iron pipe, etc. | Atlanta, Ga. | | Mar. 14 |
| | Advertised, Eng. News, Mar. 14 and 21. | | | |
| Apr. 10 | Canal | Belle Fourche, S. Dak. | | Feb. 21 |
| | Advertised, Eng. News, Feb. 21 and 28. | | | |
| Apr. 10 | Water main | New York, N. Y. | | Apr. 4 |
| Apr. 13 | Drain | Valley City, N. Dak. | | Mar. 28 |
| Apr. 15 | Canal | Portland, Ore. | | Feb. 21 |
| | Advertised, Eng. News, Feb. 21 to Mar. 14. | | | |
| Apr. 15 | Carting & laying pipe | New London, Conn. | | Mar. 21 |
| Apr. 15 | Water-works | Battleford, Sask. | | Mar. 21 |
| Apr. 15 | Water-works | Billings, Mont. | | Mar. 7 |
| Apr. 15 | Reservoir, etc. | Bradford, Pa. | | Apr. 4 |
| | Advertised, Eng. News, Apr. 4. | | | |
| Apr. 15 | Ditches, etc. | Sibley, Iowa | | Apr. 4 |
| Apr. 16 | Water-works | New Orleans, La. | | Apr. 4 |
| Apr. 16 | Water-works | McKeesport, Pa. | | Mar. 14 |
| | Advertised, Eng. News, Mar. 14. | | | |
| Apr. 16 | Laying pipe, etc. | Cincinnati, Ohio | | Mar. 21 |
| Apr. 16 | Ditch and laterals | Vandalia, Ill. | | Mar. 28 |
| Apr. 16 | Water-works | McKeesport, Pa. | | Mar. 28 |
| | Advertised, Eng. News, Mar. 28 and Apr. 4. | | | |
| Apr. 17 | Structures | Huntley, Mont. | | Feb. 28 |
| | Advertised, Eng. News, Feb. 28 to Mar. 21. | | | |
| Apr. 18 | Paving, etc. | Erie, Pa. | | Mar. 28 |
| | Advertised, Eng. News, Mar. 28. | | | |
| Apr. 19 | Water-works | Simcoe, Ont. | | Apr. 4 |
| Apr. 20 | Trenching, etc. | Richmond, Que. | | Apr. 4 |
| Apr. 20 | Water-works | Maple Creek, Sask. | | Apr. 4 |
| Apr. 20 | Levees, drains, etc. | Rock Island, Ill. | | Mar. 28 |
| Apr. 23 | Galv. iron water pipe | South Africa (Foreign) | | Apr. 4 |
| Apr. 23 | Water-works | Thorold, Ont. | | Apr. 4 |
| Apr. 24 | Water-works | Ft. Moultrie, S. C. | | Mar. 28 |
| | Advertised, Eng. News, Mar. 28 to Apr. 18. | | | |
| Apr. 29 | Ditches | Garner, Iowa | | Apr. 4 |
| Apr. 30 | Ditches, etc. | Belle Fourche, S. Dak. | | Mar. 28 |
| May 1 | Water-works | Hartsville, S. C. | | Apr. 4 |
| May 2 | Completing pumping station | Phila., Pa. | | Apr. 4 |
| | Advertised, Eng. News, Apr. 4 to 25. | | | |
| May 2 | Reservoir | Astoria, Ore. | | Mar. 28 |
| May 6 | Filters, etc. | Albany, N. Y. | | Apr. 4 |
| | Advertised, Eng. News, Apr. 4 to 18. | | | |
| May 15 | Ditch | Albany, Ill. | | Mar. 28 |
| | Advertised, Eng. News, Mar. 28 to Apr. 18. | | | |
| May 21 | Ditches | Mitchell, Neb. | | Apr. 4 |
| | Advertised, Eng. News, Apr. 4 to 25. | | | |
| June 3 | Well, etc. | Fort Bliss, Tex. | | Mar. 21 |
| June 5 | Dike | Crawford, Neb. | | Mar. 21 |
| | Advertised, Eng. News, Mar. 21 to Apr. 11. | | | |

#### SEWERAGE.

| | | | | |
|---|---|---|---|---|
| Apr. 4 | Sewers, etc. | New York, N. Y. | | Mar. 28 |
| Apr. 4 | Septic tank | Ithaca, N. Y. | | Mar. 14 |
| | Advertised, Eng. News, Mar. 14 and 21. | | | |
| Apr. 5 | Tunnel | Boston, Mass. | | Mar. 14 |
| | Advertised, Eng. News, Mar. 14. | | | |
| Apr. 5 | Trenches | Boston, Mass. | | Mar. 7 |
| | Advertised, Eng. News, Mar. 7. | | | |
| Apr. 5 | Sewer | Des Moines, Iowa | | Mar. 28 |
| Apr. 6 | Sewers | Fond du Lac, Wis. | | Mar. 28 |
| Apr. 8 | Sewers | Canaan, Conn. | | Mar. 28 |
| | Advertised, Eng. News, Mar. 28 and Apr. 4. | | | |
| Apr. 8 | Sewers | Oshkosh, Wis. | | Mar. 21 |
| Apr. 9 | Sewer | Ridley Park, Pa. | | Apr. 4 |
| Apr. 9 | Sewers | Winnetka, Ill. | | Apr. 4 |
| Apr. 10 | Underdrain | Youngstown, Ohio | | Apr. 4 |
| Apr. 10 | Interceptors, etc. | Baltimore, Md. | | Mar. 7 |
| | Advertised, Eng. News, Mar. 7 and 14. | | | |
| Apr. 11 | Sewer | Parkersburg, W. Va. | | Mar. 14 |
| | Advertised, Eng. News, Mar. 14 and 21. | | | |
| Apr. 11 | Sewers | New York, N. Y. | | Apr. 4 |
| Apr. 11 | Sewers | Galveston, Tex. | | Apr. 4 |
| Apr. 11 | Sewers | Spokane, Wash. | | Apr. 4 |
| Apr. 12 | Sewers | Washington, D. C. | | Mar. 21 |
| | Advertised, Eng. News, Mar. 21 and 28. | | | |
| Apr. 15 | Sewer | Washington, D. C. | | Mar. 28 |
| | Advertised, Eng. News, Mar. 28 and Apr. 4. | | | |
| Apr. 15 | Sewers | Galena, Kan. | | Apr. 4 |
| Apr. 16 | Ditch and laterals | Vandalia, Ill. | | Apr. 4 |
| Apr. 16 | Sewers | Troy, Ala. | | Apr. 4 |
| Apr. 23 | Sewers | Rushville, Ind. | | Mar. 28 |
| | Advertised, Eng. News, Mar. 28 and Apr. 4. | | | |
| Apr. 30 | Sewers | Fernie, B. C. | | Mar. 28 |
| | Advertised, Eng. News, Mar. 28 to Apr. 11. | | | |
| Apr. 30 | Sewers | Brampton, Ont. | | Apr. 4 |
| May 1 | Sewers and water-works | Hartsville, S. C. | | Mar. 28 |
| | Advertised, Eng. News, Mar. 28 to Apr. 25. | | | |
| May 1 | Sewers | Camden, S. C. | | Mar. 28 |
| | Advertised, Eng. News, Mar. 28 to Apr. 25. | | | |

#### STREETS AND ROADS.

| | | | | |
|---|---|---|---|---|
| Apr. 4 | Paving, etc | New York, N. Y. | | Mar. 28 |
| Apr. 4 | Paving, etc. | Cincinnati, Ohio | | Mar. 21 |
| Apr. 5 | Roads | Vincennes, Ind. | | Mar. 21 |
| Apr. 5 | Repaving | Buffalo, N. Y. | | Mar. 28 |
| Apr. 5 | Sidewalks | Union, N. J. | | Apr. 4 |
| Apr. 6 | Paving | Marinette, Wis. | | Mar. 28 |
| Apr. 8 | Paving | Binghamton, N. Y. | | Mar. 21 |
| | Advertised, Eng. News, Mar. 21 to Apr. 4. | | | |
| Apr. 8 | Repaving | Binghamton, N. Y. | | Mar. 21 |
| | Advertised, Eng. News, Mar. 21 to Apr. 4. | | | |
| Apr. 8 | Paving, etc. | Cincinnati, Ohio | | Mar. 21 |
| Apr. 8 | Grading, etc. | Oshkosh, Wis. | | Mar. 21 |
| Apr. 8 | Grading, etc. | New York, N. Y. | | Apr. 4 |
| Apr. 8 | Paving | New Orleans, La. | | Apr. 4 |
| Apr. 9 | Paving, etc. | Cincinnati, Ohio | | Mar. 28 |
| Apr. 10 | Grading, etc. | Baltimore, Md. | | Apr. 4 |
| Apr. 10 | Paving | Buffalo, N. Y. | | Apr. 4 |
| Apr. 10 | Macadam | Youngstown, Ohio | | Apr. 4 |
| Apr. 10 | Road | Harrisburg, Pa. | | Apr. 4 |
| Apr. 11 | Paving | Buffalo, N. Y. | | Apr. 4 |
| Apr. 11 | Limestone, etc. | New York, N. Y. | | Apr. 4 |
| Apr. 11 | Grading, etc. | Baltimore, Md. | | Apr. 4 |
| Apr. 12 | Paving, etc. | Louisville, Ky. | | Apr. 4 |
| Apr. 12 | Paving, etc. | St. Louis, Mo. | | Apr. 4 |
| Apr. 13 | Grading, etc. | Columbus, Ohio | | Mar. 28 |
| Apr. 13 | Roads | Terre Haute, Ind. | | Mar. 28 |
| Apr. 13 | Paving, etc. | Cleveland, Ohio | | Apr. 4 |
| Apr. 15 | Brick, curbing, etc. | Savannah, Ga. | | Apr. 4 |
| Apr. 15 | Paving, etc. | Willoughby, Ohio | | Apr. 4 |
| Apr. 15 | Paving, etc. | Trenton, Mo. | | Apr. 4 |
| Apr. 15 | Grading, etc. | St. Paul, Minn. | | Apr. 4 |
| Apr. 15 | Paving, etc. | Cincinnati, Ohio | | Mar. 28 |
| Apr. 16 | Roads | Washington, Pa. | | Mar. 28 |
| Apr. 16 | Paving, etc. | Bayonne, N. J. | | Apr. 4 |
| | Advertised, Eng. News, Apr. 4 and 11. | | | |
| Apr. 16 | Paving, etc. | East St. Louis, Ill. | | Apr. 4 |
| Apr. 16 | Paving | Holyoke, Mass. | | Apr. 4 |
| | Advertised, Eng. News, Apr. 4. | | | |
| Apr. 16 | Highway | Ravenna, Ohio | | Apr. 4 |
| Apr. 17 | Highway | Jefferson, Ohio | | Apr. 4 |
| Apr. 17 | Paving, etc. | Ashland, Ky. | | Mar. 21 |
| | Advertised, Eng. News, Mar. 21 to Apr. 4. | | | |
| Apr. 19 | Highway | Hillsboro, Ohio | | Apr. 4 |
| Apr. 22 | Roads | Logansport, Ind. | | Apr. 4 |
| Apr. 23 | Highway | New Philadelphia, Ohio | | Apr. 4 |
| Apr. 29 | Paving | Salisbury, Md. | | Apr. 4 |
| | Advertised, Eng. News, Apr. 4-11. | | | |
| May 1 | Roads and walks | Ft. Moultrie, S. C. | | Apr. 4 |
| | Advertised, Eng. News, Apr. 4-25. | | | |
| May 1 | Macadam, etc. | Ft. Du Pont, Del. | | Apr. 4 |
| | Advertised, Eng. News, Apr. 4-11. | | | |
| May 1 | Roads, etc. | Ft. Washington, Md. | | Apr. 4 |
| May 1 | Roads, etc. | Ft. Adams, R. I. | | Apr. 4 |
| May 7 | Paving | Alexandria, La. | | Mar. 28 |

#### MISCELLANEOUS CONTRACTS.

| | | | | |
|---|---|---|---|---|
| Apr. 4 | Tug | Washington, D. C. | | Mar. 21 |
| Apr. 4 | Tunnel | Boston, Mass. | | Mar. 21 |
| | Advertised, Eng. News, Mar. 21 and 28. | | | |
| Apr. 4 | Repairing pier | Grand Rapids, Mich. | | Mar. 7 |
| | Advertised, Eng. News, Mar. 7 to Mar. 28. | | | |
| Apr. 5 | Drain | Algona, Iowa | | Feb. 28 |
| Apr. 5 | Crib and riprap | Cincinnati, Ohio | | Mar. 14 |
| | Advertised, Eng. News, Mar. 14 to 28. | | | |
| Apr. 6 | Sidewalks, Monuments | Fort Worth, Tex. | | Mar. 21 |
| | Advertised, Eng. News, Mar. 21 and 28. | | | |
| Apr. 6 | Outfitting dredges | Panama | | Mar. 28 |
| Apr. 8 | Supplies | Panama | | Mar. 28 |
| Apr. 8 | Pile dock | New York, N. Y. | | Mar. 21 |
| | Advertised, Eng. News, Mar. 21 and 28. | | | |
| Apr. 8 | Fire alarm telegraph system | New York | | Apr. 4 |
| Apr. 9 | Steel top for dam | Pittsburg, Pa. | | Mar. 28 |
| Apr. 10 | Dredging | New London, Conn. | | Mar. 28 |
| Apr. 10 | Steam shovel work | Dyersburg, Tenn. | | Mar. 28 |
| | Advertised, Eng. News, Mar. 28 and Apr. 4. | | | |
| Apr. 10 | Dredging | Brooklyn, N. Y. | | Apr. 4 |
| Apr. 11 | Stone | New York, N. Y. | | Apr. 4 |
| Apr. 11 | Cement | Brandon, Man. | | Feb. 14 |
| | Advertised, Eng. News, Feb. 14 to Mar. 7. | | | |
| Apr. 11 | Subway | New York, N. Y. | | Mar. 21 |
| Apr. 11 | Wharf | Charlottetown, P. E. I. | | Mar. 21 |
| Apr. 12 | Ditches | Brookings, S. Dak. | | Oct. 13 |
| Apr. 13 | Chess wagons | Washington, D. C. | | Mar. 21 |
| | Advertised, Eng. News, Mar. 21 to Apr. 4. | | | |
| Apr. 13 | Wharfs, coal shed | New Rochelle, N. Y. | | Apr. 4 |
| Apr. 13 | Signal and telephone cable | Wash., D.C. | | Apr. 4 |
| | Advertised, Eng. News, Apr. 4-11. | | | |
| Apr. 13 | Steam cranes, dump wagons | Spain (foreign) | | Apr. 4 |
| Apr. 15 | Fire Dept. equipment | Vicksburg, Miss. | | Apr. 4 |
| Apr. 15 | Sand | New York, N. Y. | | Apr. 4 |
| Apr. 15 | Cement | Montrose, Colo. | | Mar. 21 |
| | Advertised, Eng. News, Mar. 21 to Apr. 11. | | | |
| Apr. 15 | Bear-trap gates | Wheeling, W. Va. | | Mar. 21 |
| | Advertised, Eng. News, Mar. 21 to Apr. 11. | | | |
| Apr. 16 | Wireless sets | New York, N. Y. | | Mar. 28 |
| Apr. 16 | Light-house foundation | Philadelphia, Pa. | | Mar. 28 |
| | Advertised, Eng. News, Mar. 28 and Apr. 4. | | | |
| Apr. 17 | Buoy service | Detroit, Mich. | | Mar. 28 |
| Apr. 17 | Crematory | Birmingham, Ala. | | Apr. 4 |
| Apr. 18 | Breakwater | Goderich, Ont. | | Apr. 4 |
| Apr. 18 | Dam, excavation | Brookville, Ind. | | Apr. 4 |
| Apr. 20 | Subway | Jacksonville, Fla. | | Apr. 4 |
| Apr. 20 | Levees, etc. | Rock Island, Ill. | | Mar. 28 |
| Apr. 20 | Cement, stone, sand | Portland, Me. | | Mar. 28 |
| | Advertised, Eng. News, Mar. 28 to Apr. 18. | | | |
| Apr. 20 | Locomotive jib crane | Philadelphia, Pa. | | Mar. 28 |
| Apr. 22 | Cement | Provo, Utah | | Mar. 28 |
| | Advertised, Eng. News, Mar. 28 to Apr. 18. | | | |
| Apr. 22 | Crematory | Portland, Ore. | | Mar. 28 |
| | Advertised, Eng. News, Mar. 28 to Apr. 18. | | | |
| Apr. 22 | Tunnels, approaches, bridge substructures | Long Island City, N. Y. | | Mar. 21 |
| | Advertised, Eng. News, Mar. 21. | | | |
| Apr. 23 | Dam machinery | Louisville, Ky. | | Mar. 28 |
| | Advertised, Eng. News, Mar. 28 to Apr. 18. | | | |
| Apr. 24 | Removing garbage, etc. | Schenectady, N. Y. | | Mar. 21 |
| | Advertised, Eng. News, Mar. 21. | | | |
| Apr. 25 | Subways | New York, N. Y. | | Apr. 4 |
| Apr. 30 | Cement | Roumania (foreign) | | Apr. 4 |
| May 2 | Rip-rap | Wilmington, N. C. | | Apr. 4 |
| May 2 | Dredging | Des Moines, Iowa | | Mar. 14 |
| May 15 | Dredging | Albany, Ill. | | Mar. 28 |
| | Advertised, Eng. News, Mar. 28 to Apr. 18. | | | |
| May 21 | Lock and approaches | Donaldsonville, La. | | Mar. 28 |
| | Advertised, Eng. News, Mar. 21 to May 16. | | | |
| July 1 | Tunnel | New Zealand (Foreign) | | Sept. 13 |
| | Advertised, Eng. News, Sept. 13 to Mar. 14. | | | |

#### CIVIL SERVICE EXAMINATIONS.

| | | | | |
|---|---|---|---|---|
| Apr. 4 | Assistant Engr. | New York, N. Y. | | Mar. 14 |
| | Advertised, Eng. News, Mar. 14 to 28. | | | |
| Apr. 10 | Engineer | Fort H. G. Wright, N. Y. | | Apr. 4 |
| Apr. 17 | Scientific Assistant | Washington, D. C. | | Apr. 4 |
| Apr. 20 | Foreman Pub. Wks. | Albany, N. Y. | | Apr. 4 |
| Apr. 20 | Foreman, Carpenter | Albany, N. Y. | | Apr. 4 |
| Apr. 20 | Asst. Engr. | Albany, N. Y. | | Apr. 4 |
| Apr. 23 | Mechanical Dftsman. | New York, N. Y. | | Apr. 4 |
| Apr. 24 | Testing Assistant | Washington, D. C. | | Apr. 4 |
| Apr. 24 | Apprentice Dftsman | Washington, D. C. | | Apr. 4 |
| Apr. 24 | Asst. Geologist | Washington, D. C. | | Apr. 4 |
| Apr. 24 | Geologist | Philippines | | Apr. 4 |
| May 8 | Assistant Engr. | New York, N. Y. | | Mar. 21 |
| | Advertised, Eng. News, Mar. 21 to Apr. 18. | | | |
| May 29 | Topograph Draftsman | New York, N. Y. | | Mar. 21 |
| | Advertised, Eng. News, Mar. 21 to May 9. | | | |
| June 4 | Asst. Engineer | New York, N. Y. | | Apr. 4 |
| | Advertised, Eng. News, Apr. 4-25. | | | |

## RAILWAYS.

*The names of parties awarded contracts are printed in capital letters.*

ATLANTIC, NORTHERN & SOUTHERN.—H. S. Rattenborg, Gen. Mgr., Atlantic, Iowa, informs us that this company probably will let contracts about May 1 for building projected railway. It is to extend from Manning to Villisca, Iowa, 78 miles. The first sections will be built from Atlantic to Kimballton and Elkhorn. Surveys have been run. Capital and right-of-way are partly obtained. J. A. McWaid is Pres., Atlantic, Iowa. Noted on Feb. 14

BROKEN BOW & WESTERN.—This company has been organized at Broken Bow, Neb., to build a railroad from that place west to coal fields. The projectors are Stillman P. Cront, James Stockham, Jules Baumont, Jesse Gandy and A. J. Van Antwerp.

CALIFORNIA MIDLAND.—A meeting is to be held on April 5 by this company to issue stock to secure funds for building its proposed line from Marysville, Cal., east via Grass Valley to Nevada City, with a diverging line south to Auburn, Cal., a total of 55 miles. John Martin is Pres. and H. Malloch, Secy., at San Francisco. Both are officials of the Union Traction Co., of Santa Cruz.

CANADIAN PACIFIC.—Official announcement is made, at Montreal, that the construction programme for the present year includes the following extensions: From Teulon, Man., northward, 20 miles; extension of the Pleasant Hills branch to a junction with the Wetaskiwin branch, completing a through connection between the Calgary & Edmonton line at Wetaskiwin and the main line at Kirkella, Man., 348 miles; from Lauder, in southern Manitoba, westward, 29.24 miles; from Wolseley, Sask., to Kaiser, completing the Wolseley-Reston branch, 24.2 miles; from Weyburn to Stoughton, in southern Saskatchewan, 37 miles; from Moose Jaw northward, 59 miles; extension of the Wetaskiwin branch eastward, 48.5 miles; from Bredenbury, on the Manitoba & Northwestern branch, to Esterhazy, on the Pleasant Hills branch, 20 miles; from Shehosask, on the Manitoba & Northwestern branch, northward to a junction with the Pleasant Hills branch, 82.89 miles; from Lethbridge to MacLeod, change of line, 31.3 miles; total, 978 miles; double-tracking Winnipeg to Fort William, 426.7 miles.

CENTRAL OF GEORGIA.—W. J. OLIVER & CO., of Knoxville, Tenn., has contract for removal of 400,000 cu. yds. of earth, for grading new yards at Macon, Ga., it is reported.

CHATTANOOGA, WAYCROSS & JACKSONVILLE.—This company has applied for a charter in Georgia to build a railroad from Waycross via Eastman to Macon, as previously noted. Incorporators are John M. Cox, Dan Lott, J. S. Williams, S. W. Hitch, C. M. Sweat, G. P. Folks, M. L. Moore, W. W. Sharpe, W. B. Ellington, W E. Sirmans, James Knox and Darien Lott, all of Waycross, Ga.

CINCINNATI INTERSECTING. — Incorporated in Ohio to build a belt line at Cincinnati, from Redbank to Wilton Place, twelve miles. Capital stock, $100,000. Incorporators: H. L. Rockel, Walter C. Taylor, Harlow C. Farrell, James B. O'Donnell, R. C. Cronin, all of Cincinnati.

DEMOPOLIS & LINDEN.—This company has completed its incorporation to construct 16 miles of standard-gage railroad from Demopolis to Linden, Ala. The company is fully organized and has finished surveys and secured right-of-way and valuable franchises from Demopolis and $20,000 as a cash bonus. The company will float $225,000 in bonds for construction purposes. Henry McDaniel, of Demopolis, Ala., is interested.

DETROIT & MACKINAC.—H. S. Waterman, Ch. Engr., East Tawas, Mich., states that this company is building an extension from Alpena to Atlanta, Mich., 36 miles, and that grading has been completed from Alpena west 1½ miles. The line is surveyed from Alpena to Hillman, 23 miles, and is under survey from the latter point to Atlanta, 13 miles. The company is doing its own construction work. J. D. Hawks is Pres., Detroit, Mich.

HANNAFORD VALLEY.—The survey of this line from Tacoma, Wash., to the mines of the Hannaford Valley Coal Co., near Centralia, Wash., about 65 miles, has been completed. It is announced that the work of construction is to begin at once. H. W. Treat, of Seattle, is Pres., P. H. Smith Vice-Pres. and Alexander McLaren Secy. and Treas.

LINCOLN NORTHERN.—Company has been incorporated in California, with capital stock of $11,200. A line eleven miles long will be built from Lincoln, Cal., to the Dairy Farm mine, connecting the mine with the Southern Pacific Ry. The incorporators are E. A. Calvin, William F. Herrin, William Hood, N. T. Smith and J. L. Willcutt, all of San Francisco, who are connected with the S. P. Ry.

MISSOURI CENTRAL.—Company has made survey for its line, which is to run from St. Louis, Mo., to Kansas City, with a branch from Glasgow to Brookfield. Other points touched are St. Charles, New Florence, Fulton, Columbia, Fayette and Keytesville. The enterprise has not yet been financed, but charter and right-of-way have been obtained. George B. Harrison is Pres.; H. K. Givens, Vice-Pres.; Howard Ellis, Secy., and W. B. Cawthorn is Engr. Noted last week.

SEABOARD AIR LINE.—It is announced that surveys have been made for a detour freight line around Raleigh, N. C., and for reducing grades on its main line to Hamlet, N. C. Construction is not yet determined. R. M. Coburn is Asst. Engr., at Raleigh.

TAMPA & WEST COAST.—Incorporated in Florida to build a railroad from Tampa to Clearwater and St. Petersburg, a distance of 40 miles. Capital stock, $300,000. Incorporators: J. N. Holmes, C. B. Ware and J. Craig Phillips. Headquarters, Tampa, Fla.

TEKOA & ST. MARIES RIVER.—This company, recently incorporated in Washington to build a railway from Tekoa to a point on the St. Maries River, a distance of 50 miles, has completed its organization, and surveys have been commenced. It is expected to have 25 miles of the road completed ready for operation by Sept. 1. F. J. Mahoney is Pres.; E. C. Dowel, Vice-Pres.; M. D. O'Connell, Secy., and Dr. W. A. Mosier, Treas., all with headquarters at Tekoa, Wash. Noted on March 21.

TENNESSEE.—The Trenton, Tenn., City Council, it is reported, has made an appropriation to survey the proposed railroad from Trenton to Milan, Tenn. T. J. Happel, G. W. Wade and R. J. Taylor are Trustees.

TEXAS.—The Texas Railroad Co., of Winnsboro., capital $16,500, has been chartered to build a line 16½ miles long from Winnsboro to Mt. Vernon, Tex. The incorporators are M. D. Carlock, C. H. Morris and J. M. Langford.

The Callagnan & Graham General Contracting & Engineering Co., Box 1079, Beaumont, Tex., desires estimates on general contracting and railroad construction supplies.

VIRGINIA.—The Shenandoah Lumber Co., it is reported, will build a standard-gage railroad from a point on the Chesapeake & Ohio Ry., near Millboro, to Williamsville, Va. Line will be 20 miles long, following Mill Creek and Cowpasture River. C. E. Ryan, of Parkersburg, W. Va., is Pres. of the company; J. O. Whiting and J. O. Carey, also of West Virginia, are interested.

VIRGINIA NORTHERN.—This company has been incorporated in West Virginia with $50,000 capital, to build a line from Bradshaw, in McDowell County, W. Va., along Bradshaw Creek and Middle Fork to a point in Virginia. Heaquarters of the company are in the Rockefeller Building, Cleveland, Ohio. The incorporators are T. E. Young, A. C. Hezlop, A. D. Baldwin and A. S. Heckler, all of Cleveland.

WYANDOTTE & LAWRENCE.—Incorporated in Kansas to build a railroad, 38 miles long, from Lawrence, Kan., to Kansas City, through Douglas, Johnson, Leavenworth and Wyandotte counties. It is to be operated by steam engines or electric or gasoline motors. Capital stock, $510,000. Incorporators: Benjamin Schnierle, J. E. Wherrell, F. K. Schuepbach, H. C. Downs and E. Y. Blum, all of Kansas City, Kan.

## ELECTRIC RAILWAYS.

MINEOLA, N. Y.—The New York & Long Island Traction Co. held a meeting on March 22, at which officers were elected as follows: George A. Stanley, of Cleveland, Ohio, Pres.; C. S. Thrasher of Cleveland, Vice-Pres.; Joseph Nutt, of Cleveland, Treas.; J. A. MacElhinney, 120 Broadway, New York, Secy.; G. A. Stanley, of Cleveland; C. S. Thrasher, of Cleveland; Joseph Nutt, of Cleveland; William Christy, of Akron; B. F. Hamilton, B. R. Duff, J. A. MacElhinney and F. B. Jordan, of New York, and T. Kerrigan, of Sea Cliff, are directors. Noted on March 21. The company plans to build first to connect Mineola, Roslyn and Port Washington. Later, from Roslyn a line will be built to Manhassett and Great Neck, and eventually to the New York city line at Little Neck. All franchises have been secured, and there are on deposit a bond for $5,000 and $5,000 in cash to insure the construction of the line. The contract for building has been placed with the CLEVELAND CONSTRUCTION CO. and work will be begun at once. The plan is to rush construction, and it is hoped to have the Mineola, Roslyn and Port Washington line, ten miles long, completed and in operation by Sept. 1. At Mineola connection will be made with the New York & Long Island Traction Co.'s system, which connects Mineola, Hempstead and Freeport, and affords a connection with the lines of the Brooklyn Rapid Transit Co. through the medium of the Lond Island Electric Ry., which operates between Jamaica and Queens. The company has arranged with the Nassau Electric Light & Power Co. for securing power from that company's plant at Glen Cove.

WATERTOWN, N. Y.—The Watertown & Carthage Traction Co. has applied to the Board of Village Trustees asking for a renewal of the franchise granted by the village. The present franchise will expire July 1. John N. Carlisle is Pres., at Watertown. Arthur S. Fairchild, 49 West 44th St., New York, is Treas. Contract for copstruction has been awarded, it is said.

TRENTON, N. J.—Engineers are said to have completed surveys for the extension of the New Jersey & Pennsylvania Traction Co.'s line from Princeton to Somerville. The road will extend eastward from the foot of Witherspoon St. to Kingston, Rocky Hill, Griggstown, Millstone and Somerville, a distance of about 18 miles. Charles Serfass is Ch. Engr., Yardley, Pa. John G. Honecker, Trenton, is Gen. Mgr., Vice-Pres. and Pur. Agt.

SOUTH BETHLEHEM, PA.—The South Bethlehem & Saucon Street Railway Co. has elected Charles P. Hoffman, of South Bethlehem, Pres., and William H. Lauer, of South Bethlehem; O. H. Wieand, Thomas Mulligan, P. F. Cannon, of Allentown, and C. P. Hoffman, of South Bethlehem, directors. This company will soon begin a line from South Bethlehem to Center Valley, where it will connect with the Philadelphia & Lehigh Valley Traction line.

NEWBERRY, S. C.—H. L. Parr and others have applied to the City Council for an electric street railway franchise.

COLUMBIA, S. C.—The Chamber of Commerce has appointed a committee on State electric railroads. L. B. Dozier, G. A. Guignard and E. A. Beall are the committee.

BRUNSWICK, GA.—An electric street railway franchise has been granted to F. D. M. Strachan and his associates. The plant of the Mutual Light & Water Co. will be turned over to the city by Mr. Strachan as soon as an arbitrated value can be settled. The city is to pay for it in five years, with a payment of $10,000 as soon as the value is established. The franchise is to cover a period of 50 years, the contract lasting only ten years.

BRYAN, OHIO.—The Toledo & Indiana Ry. Co. will extend its line from this place to Waterloo, Ind., and arrangements are said to be completed. Most of the right-of-way has been secured and there will be practically no litigation. The company probably will have to wait for a better money market in order to finance the extension, however. E. E. Darrow is Gen. Mgr. and Pur. Agt., Toledo.

SANDUSKY, OHIO.—The Sandusky, Fremont & Southern Ry. Co. has awarded contract to GEORGE KINNEY, of Fremont, for building its line between Fremont and Vickery, Ohio. F. J. Stout is Gen. Mgr., Norwalk, Ohio.

TOLEDO, OHIO.—The Toledo, Wabash & St. Louis R. R. Co. has been incorporated in Maine with $6,000,000 capital. The incorporation of the Toledo, Wabash & St. Louis is a further development of the projected road heretofore known as the Toledo & Defiance Ry. Co. The Toledo & Defiance is to be the holding company, and it is said that eventually the whole proposition will be merged into the Toledo, Wabash & St. Louis. The officers of this company are as follows: Pres. and Gen. Mgr., Clarence D. Whitney; Vice-Pres., George C. Metzger; Treas., J. P. McAfee; Secy., S. L. McAfee, all of Toledo. The Riggs & Sherman Co. is the Engr. President Whitney states that the Toledo & Defiance Ry. Co. will secure all the right-of way, franchises and other concessions, and the road will be constructed on the basis of the best steam roads. The roadbed will be constructed on a 1½% grade, and will be well ballasted and equipped with 70-lb. steel rails. It will be capable of handling heavy freight. The equipment wil be modern and up-to-date. The road will be constructed in sections. Company will first complete the Toledo-Defiance section and after that will continue westward. Arrangements have been completed whereby Burr Bros., Flatiron Bldg., New York city, will underwrite the stock. The Carnegie Trust Co., New York, will act as transfer agent, and the Columbia Trust Co., New York, as registrar. There will be no bond issue and no preferred stock. Company expects to begin construction of the Toledo-Defiance section in the near future. Preliminary surveys for this section of the road have already been made by the Riggs & Sherman Co.

LEBANON, IND.—We are officially advised that the Circuit Traction Co. will let contracts soon for building its proposed line. It will extend from Lebanon to Danville, Martinsville, Shelbyville, Greenfield and Kokomo, 170 miles in length, practically forming a loop. Surveys are made and right-of-way partly obtained. Capital has not been secured yet. J. N. Crabb, Law Bldg., Indianapolis, is Pres.

INDIANAPOLIS, IND.—The Grand Central Traction Co., with $250,000 capital stock, has filed articles of incorporation with the Secretary of State. The company proposes to build an electric railway between Indianapolis and Evansville and the intervening towns and villages, with a branch line from Bloomington to Terre Haute and intervening towns. The lines will run through the counties of Marion, Johnson, Brown, Monroe, Lawrence, Orange, Dubois, Warrick, Vanderburg, Owen, Clay and Vigo. The company's office will be in Indianapolis. D. H. Morgan, Ora W. Blickenstaff, Wm. D. Whitney, M. P. Carter and W. D. Duncan are the directors.

VANCOUVER, WASH.—The Washington Ry. & Power Co., Arthur Langguth, Secy., 606 McKay Bldg., Portland, Ore., has secured franchises from the city of Vancouver for an electric railway to run on the principal streets of that city, and will soon be ready to take up the matter of construction of same. It is part of that company's plans to push out into the very populous country lying around Vancouver. The track will be standard-gage and built to admit of heavy interurban traffic.

ASTORIA, ORE.—An ordinance is before the Council granting a 30-year franchise to E. B. McFarland and S. D. Adair for an electric railway starting in this city and running thence across Young's Bay to Warrentown, Flavel, Fort Stevens and then on to Gearhart Park and Seaside, all in Clatsop County.

OREGON CITY, ORE.—The Oregon City, Beaver Creek & Molalla Ry. Co. has filed articles of incorporation, with a capital stock of $100,000. The incorporators are Grant B. Dimick, Judge Thomas F. Ryan and J. W. Sherwood, of Portland. It is the purpose of the company to construct and operate a steam or electric railway from Oregon City in a southerly direction to Beaver Creek, Highland, Liberal, Molialla and Wilhoit Springs.

PORTLAND, ORE.—The Council has granted a franchise to the Portland & Mount Hood Ry. Co. for the right-of-way for the terminal facilities on the East Side. Dr. M. G. McCorkle, of Portland, promoter of the project, states that actual construction work on the line will begin within two months. It will take several years to complete the line, which will cost approximately $2,000,000. It proposes to build an electric road to the base of Mount Hood, and from there to construct a cog road to the summit of the mountain.

CHICO, CAL.—We are officially advised by C. S. Compton, Ch. Engr., Northern Electric Co., Chico, that R. A. MONCURE, Oakland, Cal., is contractor for 28-mile extension now under construction from Marysville to Colusa. The line is now in operation between Chico and Marysville, 55 miles.

MEDICINE HAT, ALTA.—Town Council has decided to construct an electric street railway to connect the city with the new car works to be erected this spring. W. Cousins is Mayor.

## LIGHT AND POWER PLANTS.

PORTSMOUTH, N. H.—Bids were opened March 30 at the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for furnishing a 1,000-KW., 125-150-volt, 3-wire, direct current generating set and accessories at the Portsmouth Navy Yard. Bids were: Providence Engineering Works, 42 Broadway, New York, item 1, $59,900, item 6, $58,500; Henry R. Worthington, 114 Liberty St., New York, item 5, $8,656, $8,469, [illegible]86, $8,722; Westinghouse Electric & Mfg. Co., Continental Trust Bldg., Baltimore, [illegible] 1, $51,966, $52,182, $46,774, $46,395, $[illegible]5, item 3, $49375, item 6, $41,225.

BROCKTON, MASS.—The [illegible] Board of Gas and Electric Light Co[illegible]loners has received petitions from three [illegible]ing companies in this distr[illegible]ctric light-permission to issue additions[illegible]asking for floating debt and for pr[illegible]ck to pay [illegible]d improvements to their plants. One [illegible] these petitions is from the Edison Ele[illegible] Illuminating Co., of this city, which [illegible]s to issue $550,000 more stock. A se[illegible] petition is from the Stoughton Gas [illegible]ctric Co., which wants to issue new s[illegible] to amount of $34,000. The third is fro[illegible]he Electric Light & Power Co. of Abing[illegible] and Rockland, where it is proposed to [illegible] new stock to the amount of $60,000. A[illegible] Nelson is Supt. of the Edison Electric [illegible]luminating Co., Brockton; F. S. Barton [illegible]upt. of the Stoughton Company, and F. [illegible] Sanderson, North Abington, is Supt. of the [illegible]bington and Rockland Company.

ROME, N. Y.—Bids are as[illegible] until 8 p. m., Feb. 4, by the Board of [illegible]blic Works, for lighting this city for a term [illegible] five years, the present contract ending [illegible] 4, 1908. In the present contract, held [illegible] the Rome Gas, Electric Light & Power [illegible] there are 233 street lamps, the contract price being $113.15 a light per year.

MECHANICVILLE, N. Y.—We are officially advised that the work of constructing the power plant to be erected on the property recently purchased by The Delaware & Hudson Co. on the bank of the Hudson River just south of Mechanicville, will be begun at once by the HUDSON VALLEY CONSTRUCTION Co., to whom the contract has been awarded. It is proposed to build a steam turbine power plant for generating electric power for The Hudson Valley Railway Co., including large buildings and an elaborate system of tracks, trestles and coal storage grounds. Spurs from the main line of the Delaware & Hudson R. R. will run to the property from both north and south, and according to the plans prepared by the architects, J. G. White & Co., the power station will be erected about 1,000 ft. north of the dam of The Hudson River Electric Power Co. The engineers of The Hudson Valley Construction Co. have been making measurements at the property and the company will begin soon to make excavations for building an intake canal from the river through the site of the big power station. This canal will be 480 ft. long and twelve ft. wide and will furnish water for the condensing plant. The engine room to be constructed will be about 180 × 70 ft. and the boiler room about 180 × 75 ft. The Delaware & Hudson Co. will expend between $500,000 and $600,000 in the construction of the plant. It is expected to have a part of it ready for operation in August of this year. A. Eckstrom is Consult. Electrical Engr., D. & H. Co., Albany; Charles P. Boland is Gen. Mgr. of the Hudson Valley Construction Co., Times Bldg., Troy.

NEW YORK, N. Y.—Bids are asked until 10 a. m., April 10, by the Board of Health of the Department of Health, for completing an underground conduit system and installing a wiring system for electric lighting, fire alarm, watchman's time detector and telephones, together with all work incidental thereto in certain buildings, and throughout the grounds of the Willard Parker Hospital, foot of East 16th St., Boro. of Manhattan. Dr. Thomas Darlington is Pres.

EAST ORANGE, N. J.—Bids are asked by Edgar Williams, City Clk., until 8 p. m., April 8, for lighting the streets by electricity, also with gas, both Welsbach and open flame lights, for one, three and five years, from June 1, 1907. (Advertised, Engineering News.)

WILKES-BARRE, Pa.—The Lehigh Valley R. R. Co. has announced that it intends to establish a power plant at the Dorrance colliery. Two engines will be used to furnish the power and to illuminate the breaker and its surroundings, as well as for the operation of the stationary and hoisting engines. A. M. McGill is Master Mechanic, Wilkes-Barre.

HAGERSTOWN, MD.—The Hagerstown Gas Co. has awarded to BARTLETT, HAYWARD & CO., Continental Trust Bldg., Baltimore, the contract to build a storage tank of 300,000 cu. ft. capacity in the southern suburbs of Hagerstown. SANFORD & BROOKS, 15 South St., Baltimore, have contract to drive the 500 pine pile for the foundation of the tank.

NORFOLK, VA.—THE SHELL CONTRACTING CO., Beaufort, N. C., has secured contract for constructing a power-house at the navy yard. The building will be fireproof, one story, brick, stone and steel, and will cost about $80,000.

PULASKI, VA.—It is reported that plans are being prepared by H. S. Morrison, Engr., 18th and Dock Sts., Richmond, Va., for an electric light plant for this city which will have a capacity of 1,000 HP. Cost, $25,000.

MORGANTOWN, W. VA.—The West Virginia University will erect a building and tunnel for heating plant. Cost, with equipment complete, $42,000. F. L. Emory is Engr.; D. B. Purinton is Pres. of the University.

PACOLET, S. C.—The Pacolet Mfg. Co. will build a power plant, store building and an office structure. Its power-house will be 60 × 78 ft., and its boiler-house 53 × 74 ft.

ALBANY, GA.—The Albany Power & Mfg. Co., it is reported, has decided to develop water-power on the Flint River at Porter Shoals, one mile from Albany. It will build a 25-ft. dam, install four 2,500-KW. generators, with necessary water-wheel for their operation, and erect about 100 miles of pole lines to string wires for transmitting electricity. There will be 40,000 cu. yds. of masonry in dam and power-house. J. E. Sirrine, of Greenville, S. C., is Ch. Engr.

COLUMBUS, GA.—A contract has been awarded by the Swift Spinning Mill Co. to the COLUMBUS POWER CO., the latter agreeing to furnish the former with electric power, generated by water from the Chattahoochee River, to the extent of 450 HP. This power is to be used in operating the new spinning mill of the Swift company, plans for which have been made and work on which is expected to begin next week. The mill will spin cotton yarns of various sizes.

VALLEY VIEW, KY.—According to press reports the central power-house of the Lexington & Interurban Ry. Co. is to be located at Valley View, on the Kentucky River, in Madison County. J. P. Pope, Lexington, is Electrical Engr.

ALLIANCE, OHIO.—The Alliance Gas & Electric Co. is contemplating rebuilding its plant the coming year. D. W. Low is Supt.

CLINTON, IOWA.—John Morrell & Son, Archs., have prepared plans for a 2-story retort house, 84 x 42 x 65 ft., for the Clinton Gas Light & Coke Co. Brick, Bedford stone, and steel work will be used for construction.

DECORAH, IOWA.—The Council has let contract for the machinery for the combined light and water plant. The contract was divided among several firms, as follows: Steel tower and tank, MOSS & JACKSON of Des Moines, $4,564; electrical apparatus, including two dynamos, delivered, switchboard and instruments, delivered at New Hampton, WESTINGHOUSE ELECTRIC & MFG. CO., $3,000; one Corliss, 150-HP. engine, FILER & STOELL, Milwaukee, $2,500; one 60-HP. engine, two Hawkes boilers, heater for exhaust steam, exhaust head, steam trap and boiler feed pump, $4,850, J. G. ROBERTSON & CO., 29 Gilfillan St., St. Paul. The steel tower and tank are to be 113 ft. high, the capacity of the tank to be 70,000 gallons.

HOLTON, KAN.—Contracts for constructing water-works and electric light plant are reported to have been awarded as follows: To FRANK A. HURLBUT, of Kansas City, Mo., for furnishing the equipment and power-house for $29,315, and he sublet portions of same as follows: To A. B. STROHWEG, of Holton; for the building and electric equipment to the WESTINGHOUSE ELECTRIC & MFG. CO.; steam equipment to the CREAMERY PACKAGE CO., and pumping equipment to the HENRY R. WORTHINGTON PUMP CO. The surface reservoir, steam piping and erection of power-house equipment was retained by Mr. Hurlburt. The AMERICAN CAST IRON PIPE CO. secured the contract for the c.-i. pipe at $38 per ton, and specials, 3 cts. a lb.; a total of $19,255; the WESTERN VALVE CO. for hydrants and valves, at $1,402. W. K. Palmer Co., Dwight Bldg., Kansas City, Mo., are Engrs.

HURON, S. DAK.—The Huron Gas Co. has closed a contract with the PRACTICAL GAS CONSTRUCTION CO., A. Bower, Gen. Mgr., for installing a gas plant in this city, the plant to be used for lighting and heating purposes. A franchise was granted by the City Council some time ago and it is thought the plant will be in operation by midsummer or early fall.

WILLISTON, N. DAK.—An extension of time for one month has been granted to the D'Olier Engineering Co., of Philadelphia, to install machinery for the power and pumping system, Williston irrigation project, N. Dak. According to the terms of the original contract the work should be completed by June 12, 1907, but the Government subsequently desired to add two boilers and one additional pumping unit. For the purposes of facilitating the work and securing a considerable reduction in freight by carload shipments, the engineers of the Reclamation Service requested the Secretary of the Interior to grant the above extension of time.

HOUSTON, TEX.—The Houston Lighting & Power Co., contemplates making extensive improvements to its electric-light system, including erection of addition to plant, placing wires under ground, installation of new dynamo and general machinery costing $150,000 and generating 2,000 HP. About $500,000 will be expended. W. W. Reed, Houston, is Supt.

ELGIN, TEX.—The city has granted 30-year franchise to W. H. Rivers to construct electric light and water plant. A stock company probably will be organized.

CRIPPLE CREEK, COLO.—The contract for the power to operate the machinery which will drive the bore of the Gatch Park Drainage Tunnel in Cripple Creek, has been let by the Tunnel Committee to the COLORADO LIGHT & POWER CO., of Canon City, and the committee announces that it is receiving bids on the construction works. This work comprises the driving of the tunnel from Gatch Park to the point of contact between the eruptive and the granite rock near the El Paso shaft, a distance of about 15,000 ft. William T. Wallace is Supt. of the power company, Canon City.

ALBANY, ORE.—Four miles northwest of where the Marion fork of the North Santiam River and Marion Lake join, Walter Mackay purposes to erect a power-house for development of hydro-electric energy, which shall ultimately be used to operate industries of various characters in this part of the Willamette Valley. The power-house will have a capacity of 33,000 HP. To furnish the power for the development of this energy, Mr. Mackay will build two pipe lines that will conduct enough water for the accomplishment of his plan.

OLYMPIA, WASH.—Plans for the construction of a big electric power plant in Thurston County, on the upper waters of the Nesqually River, are outlined in a suit for condemnation filed in the Superior Court of Thurston County by the Nesqually Power Co., of Tacoma. The papers state a large plant will be erected upon the banks of the Nesqually River for the purpose of generating electricity for the use of the Tacoma Eastern Ry. and for the purpose of furnishing lights to the city of Tacoma. The company proposes to erect a dam across the river and divert the water into a flume, through which it will be carried to a forepen situated upon a high hill or bluff about 2,000 ft. down the river. From here it will be taken by a penstock to the turbines.

SEATTLE, WASH.—EARLES & JOYCE, of Seattle, have secured the contract for the entire construction of the head works and power plant at Priest Rapids, on the Columbia River, for the Hanford Irrigation & Power Co.'s irrigation system. The contract calls for an expenditure of $300,000. Work will begin immediately and will be completed during 1907. H. K. Owens is Ch. Engr.

QUINCY, CAL.—The Los Angeles "Times" states that the Great Western Power Co., backed by Eastern capital, is arranging to transmit 420,000 HP. to San Francisco. The company is now employing 500 men near the North Fork of the Feather River at a point called Great Bend, where the river forms a natural horseshoe, 15 miles in circumference, with the two points within 15,000 ft. of each other. Advantage has been taken of a tunnel 12,000 ft. long, driven some years ago by the Great Bend Mining Co., which spent over a million dollars in a fruitless attempt to exploit the placer gold of the river. Only 3,000 more ft. of the tunnel will need to be driven to reach the point of discharge. The flood water is to be sent through this tunnel with a fall of over 500 ft. The distance from Great Bend to San Francisco is 180 miles. The power will be brought on copper cables strung from steel towers, seven to the mile. In Plumas County a lake 21 miles long will be constructed for a reservoir available in time of drought. It will cost $25,000,000. The president of the power company is Edwin Hawley, a director of the Western Pacific Ry. Co. It is reported that all of the Western Pacific lines in this state will be electricized and that all northern California electric roads will be merged. Oakland will be included in the power distribution.

BISHOP, CAL.—The Nevada-California Power Co. is progressing with installation of additions and improvements to its service at a total cost of $1,500,000. The company will duplicate its present system from the power-house at Bishop, Inyo County, to Goldfield and Tonopah. It is installing a second power-house and will install a third as soon afterwards as preparations are ready. The company is also duplicating its building and electrical apparatus in the Goldfield and Tonopah substations. A new substation is being erected at Silver Peak and Millers siding. The line is also being run into Rhyolite.

LOS ANGELES, CAL.—Bids are asked until 2 p. m., May 20 (change of date), by the Board of Public Works for furnishing and erecting near Tehachapi, Kern County, Cal., for the city of Los Angeles, necessary boilers, engines, electric generators and motors for delivering 1,250 HP. electric current to the Los Angeles Cement Works. Horace B. Ferris is Secy. (Advertised, Engineering News.)

SALT LAKE CITY, UTAH.—Francis M. Lyman, Jr., of Salt Lake City has filed with the State Engineer an application for the right to appropriate 20 second-feet of water from Mill Fork, a tributary of the Utah Lake-Jordan River system, the water to be used in generating 1,800 HP. for electric lighting and propelling purposes in Salt Lake County. Two wheels are to be used and the diverting works will consist of a dam, flume and pipe. A number of small applications were filed also.

DESERONTO, ONT.—We are officially advised that the citizens of Deseronto have voted in favor of taking over the gas works by the town installing electric lighting plant, and purchasing the water-works system. Dr. John Newton is Mayor.

PRINCE ALBERT, SASK.—The City Council has decided to develop the electrical energy in the Shell River at once at a cost of $250,000. C. G. Moon is City Engr.

## BRIDGES.

SOUTH HERO, VT.—We are officially advised that contract for constructing culvert at Sand Bar Bridge, South Hero, has been awarded to E. F. MOORE, of Burlington, Vt., at $6,086.

WATERTOWN, MASS.—Plans, specifications and contracts will be issued about April 15 for constructing Galen St. bridge and wing walls. The bridge will be 80 ft. wide with 90-ft. span, cut granite faces and intermediate reinforced concrete arch and abutments. Wilbur F. Learned is Town Engr. (Advertised, Engineering News.)

PATERSON, N. J.—We are officially advised that the following bids were received March 27 by the County Board of Chosen Freeholders, George W. Botbyl, Clk., for constructing steel bridge, etc., across Passaic River at Straight St., with (A) wood pavement, and (B) Mack brick: The Snare & Triest Co., 143 Liberty St., New York, (A) $56,680, (B) $55,480; Dean, Schweirs & Sutton Co., 136 Liberty St., New York, $53,472, (B) $52,267; F. R. Long Co., Hackensack, N. J., (A) $48,720, (B) $48,120. Bridge to be 253 ft. long, with 30-ft. roadway, each sidewalk 9½ ft. wide, and of lattice trusses, with riveted connections. Colin R. Wise is Engr.

READING, PA.—The County Commissioners have let contract to the FERRO CONCRETE CO., of Philadelphia, for constructing 60-ft. clear span reinforced concrete arch bridge, across North Kill Creek, between Jefferson and Penn Townships, on road leading from Bernville to Rehrersburg, at $4,437. H. F. Livengood is County Controller.

FORT MILL, S. C.—Contract has been awarded to the ROANOKE BRIDGE CO., Roanoke, Va., at $28,000, for building iron bridge over Sugar Creek connecting York and Lancaster Counties.

BATON ROUGE, LA. — The UNION BRIDGE & CONSTRUCTION CO., 606 New Nelson Bldg., Kansas City, Mo., has been awarded contract for constructing trestle incline at Baton Rouge and erecting concrete piers and abutments for bridges over Bayou Grosse Tete and Bayou Cortableau. The work is being done by the Colorado, Southern, New Orleans & Pacific R. R. Co. on their new line into New Orleans, La.

WINCHESTER, KY.—At a recent session of the Fiscal Court it was decided to erect steel bridge across Lower Howard's Creek.

GLASGOW, KY.—The Monroe County Fiscal Court has ordered bridge constructed across East Fork Creek between this city and Thompkinsville.

ZANESVILLE, OHIO.—Plans and specifications have been prepared by L. West, County Surv., for constructing two iron span bridges, one 38-ft. span, 12-ft. roadway, one 28-ft. span, 12-ft. roadway. Bids will soon be asked.

INDIANAPOLIS, IND. — The County Commissioners March 26 awarded contract for constructing a Melan concrete-steel arch bridge across White River, at Indianapolis, to the MARION COUNTY CONSTRUCTION CO., at $159,307. Bids were also received from the following: Fife & Son, $173,280; M. M. De Frees, $185,167, and Central States Bridge Co., $192,228.

KOKOMO, IND.—Bids are asked by the County Commissioners until April 14 for constructing Boyd bridge in Monroe Township; Kenton bridge, Howard Township and Horey Creek bridge, Monroe Township. William L. Benson is County Audr.

LANSING, MICH.—A steel bridge, on concrete abutments, may be constructed across Cedar River at Cedar St. H. A. Collar is City Engr.

ROCKFORD, ILL.—CHARLES C. STOWELL has been awarded contract for erecting concrete bridge, with 40-ft. span and 20-ft. roadway, across Kent Creek at Auburn St. Edward Main is City Engr.

LANCASTER, ILL.—The Commissioners of Lancaster and York Counties have let contract for erecting steel bridge over Big Sugar Creek to the VIRGINIA BRIDGE & IRON CO., of Roanoke, Va.

URBANA, ILL. — The CONTINENTAL BRIDGE CO., 560 Monadnock Blk., Chicago, Ill., has secured contract for erecting 16x80 ft. highway bridge, with reinforced concrete floor and concrete abutments. Ira O. Baker, at Champaign, Ill., is Engr.

FT. DODGE, IOWA.—Bids are asked by the County Commissioners until 2 p. m., April 5, for furnishing material and constructing one 36-ft. iron bridge, with iron stringers and cement abutments.

CROOKSTON, MINN.—Bids are asked by the County Board until 10 a. m., April 15, for repairing pile bridge in town of Hubbard, and constructing 45-ft. pile bridge across ditch No. 6 in town of Vineland. N. A. Hoffard is County Audr.

MINNEAPOLIS, MINN.—Bids are asked by the Board of County Commissioners until April 15 for constructing bridge No. 263. Hugh R. Scott is County Audr.

WICHITA, KAN.—The County Commissioners have let contract to the WICHITA CONSTRUCTION CO. for erecting steel bridge across Sand Creek, in Afton Township.

BEATRICE, NEB.—Bids are asked by the Board of County Supervisors until April 23 for constructing bridges.

GLENDIVE, MONT.—Plans, specifications and bidding sheet for constructing 16 steel and 20 combination wood and steel highway bridges in connection with the Lower Yellowstone Project, N. Dak.-Mont., are on file at office of Engineering News, New York. Bids are asked by the U. S. Reclamation Service until 2 p. m., April 25. F. E. Weymouth, Glendive, Mont., is Project Engr.

KAHOKA, MO.—Bids are being received by P. F. Hennessey, Clk., for constructing the Chewning bridge in Union Township.

PINE BLUFF, ARK.—Plans have been prepared by Walter L. Stebbins, Consult. Engr., Chicago, Ill., for constructing steel bridge across Arkansas River, to be erected by Jefferson County. Estimated cost, $375,000. Bids will probably be received this summer. James Gould is Judge.

BERWYN, IND. T.—The Berwyn Bridge Co. has been incorporated here with capital of $5,000, to construct bridge across Washita River. The officers are G. W. Young, Pres.; F. W. Fisher, Vice-Pres.; G. W. Henderson, Treas., and J. T. Carson, Secy.

MOUNTAINVIEW, WASH.—The County Commissioners have awarded contract to J. H. REIFSNYDER for constructing bridge across old channel of Nooksack River, near Mountainview.

PORTERVILLE, CAL.—We are officially advised that the Concrete Pipe & Construction Co., of Riverside, Cal., was lowest bidder for constructing steel bridge, and will probably be awarded contract. Robert Horbach is City Clk.

HEYBURN, IDAHO. — Plans are being formed by the Commercial Club for constructing wagon bridge across Snake River, between Heyburn and Burley.

BATHURST, N. B.—H. WHITE has secured contract for erecting the Bathurst station bridge, at $13,000.

FREDERICTON, N. B.—Bids are asked by C. H. Lablois, Comr. Dept. Pub. Wks., until April 8, for constructing 78-ft. metal superstructure span over Cushings Canal at Lancaster.

WILLOWDALE, ONT.—Bids are asked by P. S. Gibson & Sons, Engr., Township York, until 7 p. m., April 10, for constructing 54-ft. concrete culvert with 6-ft. span. Bids also are asked for erecting steel riveted Warren low trussed bridge, 60-ft. span, with 14-ft. clear roadway, capable of carrying 10-ton traction engine.

STRATHROY, ONT.—The County of Metcalf will erect steel and concrete bridge across Sydenham River. Address Richard Ward, at Glenwillow, Ont.

## BUILDINGS.

HANOVER, N. H.—Dartmouth College will build a gymnasium, it is reported, using $300,000 lately donated by Thomas P. Salter, of New York. William J. Tucker is Pres.

BURLINGTON, VT.—Bids are asked by James Knox Taylor, Superv. Arch., Washington, D. C., until 3 p. m., May 2, for constructing marble cornice and balustrade at the U. S. post-office and custom-house, Burlington. (Advertised, Engineering News.)

SALEM, MASS.—Bids are asked until April 15, by the County Commissioners, for constructing a building, two stories, fire-proof, for the Registry of Deeds. Wallace Bates is Chn.; Clarence Blackall, 20 Beacon St., Boston, is Arch.

PROVIDENCE, R. I.—The Treasury Department has awarded contract to HORTON & HEMENWAY, 683 Atlantic Ave., Boston, Mass., for the interior finish of the Providence public building, for the sum of $350,685.

NEW YORK, N. Y.—Bids are asked until 11 a. m., April 8, by C. B. J. Snyder, Supt. School Bldgs., for installing heating and ventilating apparatus for additions to and alterations in Public School No. 51, on south side of 45th St., about 225 ft. west of 10th Ave., Boro. of Manhattan; also, in Public School No. 81 (Teachers' Training Room), on 119th and 120 Sts., 175 ft. west of Seventh Ave., Boro. of Manhattan.

Benjamin W. Levitan, 20 West 31st St., has prepared plans for two apartment buildings, at the corner of Seventh Ave. and 111th St., for the Apartment Construction Co., 45 Lenox Ave. The buildings will have six stories, light brick, Indiana limestone, and terra cotta, structural steel and iron, fire-proof construction, iron stairs, marble and slate treads, ornamental iron balconies, electric wiring, etc. Estimated cost, $200,000.

Moore & Landsiedel, 148th St. and Third Ave., have completed plans for three flat buildings, on the south side of 146th St., 215 ft. west of Brook Ave., for Goldberg & Kramer, 835 Broadway. Each building will be six stories high, 33 x 87 ft., of brick, stone and concrete, structural iron, with tin roofs. Estimated cost, $105,000.

NEW YORK, N. Y.—Plans have been filed for a 5-story parochial school to be built at 50 East 84th St., for the Church of St. Ignatius Loyola. It is to be of limestone and brick, with a frontage of 66 ft., and a depth of 63 ft., and will cost $150,000. Schickel & Ditmars, Fifth Ave. and 18th St., are Archs.

A 5-story school is to be built at 155 Henry St., to be occupied by the new East Side Free School for Crippled Children, established for the Emanuel Lehman Foundation as a memorial. It will be of limestone and brick, with a frontage of 53 ft. and a depth of 87 ft., and will have a tile floor and a roof garden. This roof will be inclosed in glass in the winter as a sun playground. The building is to cost $175,000, according to the estimate of the architects, Schickel & Ditmars, who act for Philip Lehman, the head of the foundation.

Bids are asked until 3 p. m., April 16, by John W. Brannan, Pres. Board of Trustees, Bellevue and Allied Hospitals, for the excavation, mason, steel, carpenter, electric, heating and ventilating, and other work for the pathological department and male dormitory of the new Bellevue Hospital, situated on First Ave., and bounded by 26th and 29th Sts., Boro. of Manhattan.

Plans have been filed for a 12-story commercial building to be erected at Nos. 29 and 31 East 22d St., for the Brunswick Realty Co. Robert P. Zobel is Pres., 114 East 28th St. It will have a frontage of 52 ft., and a depth of 64 ft., with a facade of decorated limestone. It is to cost $250,000, according to the estimate of F. C. Zobel, Arch.

NEW YORK, N. Y.—James Knox Taylor, Superv. Arch. of the Treasury, Washington, has rejected all bids for installation of a vacuum cleaner system in the New York post-office.

NEW YORK, N. Y.—Bids are asked until 11 a. m., April 15, by C. B. J. Snyder, Supt. School Bldgs., for alterations, repairs, etc., for Public Schools Nos. 6, 18, 49, 53, 70, 73, 74, 76, 77, 82, 96, 183 and 190, Boro. of Manhattan; for alterations, repairs, etc., to Public Schools Nos. 2, 4, 6, 7, Bryant High School and Jamaica Training School, Boro. of Queens; for installing heating and ventilating apparatus for additions to and alterations in Public School No. 3, on south side of Church St., east of Sharrot Ave., Pleasant Plains, Boro. of Richmond.

NEW YORK, N. Y.—The bids received by C. B. J. Snyder, Supt. School Bldgs., for general construction, etc., of additions to and alterations in Public School No. 16, on Matilda and Catherine Sts., about 150 ft. south of East 240th St., Wakefield, Boro. of The Bronx, were as follows: Guidone & Galardi, 1 Madison Ave., $231,500; William Werner, 892½ Forest Ave., $227,480; Thomas Cockerill & Son, 147 Columbus Ave., $228,000; Clarke & Stowe, 41st St., near Second Ave., $237,000; Patrick Sullivan, 230 Grand St., $224,000; A. Nugent Sons, 103 East 125th St., $199,790; L. Wechsler, 1135 Broadway, $233,233; George Hildebrand, 38 Park Row, $232,440; Thomas J. Waters, 103 East 125th St., $198,903.

Bids were received at same time and place as follows for general construction, etc., of new Public School No. 153, on Homecrest Ave., Ave. T and East 20th St., Boro. of Brooklyn: Clarke & Stowe, 41st St., near Second Ave., $213,700; Wm. Werner, 892½ Forest Ave., $221,164; Thos. Cockerill & Son, 147 Columbus Ave., $228,000; R. E. Heningham, 1 Madison Ave., $206,288; Thomas McKean, 521 West 110th St., $208,439; George Hildebrand, 38 Park Row, $215,700; Arce Construction Co., $215,750; Thomas G. Carlin, $220,222.

NEW YORK, N. Y.—The following bids were received April 1 by Robert W. Hebberd, Comr. of Public Charities, for tearing down and removal, excavation, masonry, steel and iron, roofing and metal work, carpentry, glaz-

ing, painting, hardware, fitting up of closets and linen and blanket rooms and all other work, except electric, heating and ventilating and plumbing work, vacuum sweeping plant, cooking service equipment (including refrigerators), gas and electric fixtures and fitting up (other than that of closets and linen and blanket rooms) for erection and entire completion of an alteration and extension of the present Nurses' Home and a nurses' home for the Metropolitan Hospital at Blackwell's Island, the City of New York: Daniel J. Ryan, 723 Third Ave., Brooklyn, $281,996; Clarke & Stowe, 221 Greenpoint Ave., Brooklyn, $287,-300; List & Rose, 629 West 51st St., $329,-800; Thos. Cockerill & Son, 147 Columbus Ave., $314,000; Thos. B. Leahy Bldg. Co., 1 East 42d St., $273,307; J. & L. Moreland Co., 1910 Park Ave., $286,900.

The following bids were received at same time and place for electrical conduit, electric wiring and switchboard work, elevator and dumbwaiter work, heating and ventilating work, plumbing work, gas piping, vacuum sweeping plant and all other work, except tearing down and removal, excavation, masonry, steel and iron roofing and metal work, carpentry, cooking service equipment (including refrigerators), gas and electric fixtures and fitting up, for erection and entire completion of an alteration and extension of the present Nurses' Home and a nurses' home for the Metropolitan Hospital at Blackwell's Island: Blake & Williams, 211 West Twentieth St., $68,819; Wells & Newton Co., Ave. B. and 17th St., $65,200.

ELLIS ISLAND (New York post-office), N. Y.—James Knox Taylor, Superv. Arch., Washington, D. C., is preparing plans for the improvements at the Ellis Island immigration station. At the last session of Congress an appropriation of $650,000 was made for the improvement of this station, and of this $400,000 will be spent on the main building, and $250,000 will be used for the completion of the hospital for contagious diseases, which is under construction on the artificial island near Ellis Island. The money which Congress appropriated for improvements will be available the first of the fiscal year, and work will begin in August or September.

BUFFALO, N. Y.—The International Ry. Co. will commence work at once upon a car house 162 ft. wide and 565 ft. long, which is to be of brick and concrete construction, located on Broadway, east of Bailey Ave. The cost will be approximately $100,000. T. W. Wilson is Gen. Mgr.

ALBANY, N. Y.—Plans and specifications for Public Bath No. 3, to be erected at the corner of Central Ave. and Ontario St., Albany, are nearly completed. The building will cover a space of 61 ft. × 144 ft. Alternate bids are to be asked, for the entire building to be of artificial granite, or the trimmings to be of granite and the rest of building of Harvard brick. The foundations are to be of solid Portland cement concrete. The boiler room is to have two 30-HP. tubular boilers. The estimated cost is about $45,000. Plans are ready for asking for bids. Walter Melius is City Engr.

WEST POINT, N. Y.—Bids are asked by the Quartermaster, until noon, April 22, for constructing structural steel and iron stairs for the present Cadet Barracks at West Point. (Advertised, Engineering News.)

Bids are asked until noon, April 24, by the Quartermaster for plumbing fixtures, pipe and fittings for new bath and toilet rooms in the old Cadet Barracks at West Point. (Advertised, Engineering News.)

SYRACUSE, N. Y.—We are officially advised that THE CONSOLIDATED ENGINEERING & CONSTRUCTION CO. has been awarded the contract for the alterations and additions to Harold Stone's residence on Highland Ave., Syracuse. The company will be in the market, on this work, for sub-bids on parquette floors, maple flooring, plumbing, heating, painting, electric wiring and mill work.

JERSEY CITY, N. J.—The Great Atlantic & Pacific Tea Co., 260 West St., New York, is reported to have accepted plans prepared by Howard A. Chapman, 11 Broadway, New York, for an 8-story reinforced concrete warehouse, 120 × 180 ft., which it proposes erecting on Bay St., Jersey City, at a cost of about $270,000.

TRENTON, N. J.—Spencer Roberts, 1524 Chestnut St., Philadelphia, Pa., has been selected to prepare plans and specifications for the City Hall for Trenton. The structure will be of granite and steel, fireproof, three stories high and will cost $300,000.

Bids are asked until 3 p. m., May 6, by James Knox Taylor, Superv. Arch., Washington, D. C., for the construction (including heating apparatus, electric wiring and conduits) of the extension to the U. S. post-office and court-house at Trenton.

ATLANTIC CITY, N. J.—Work on a $250,000 vaudeville theatre at the Boardwalk and Maryland Ave., Atlantic City, will be begun at once by Samuel F. Nixon, of Nixon & Zimmerman, Felix Isman, real estate dealer, and Klaw & Erlanger, head of the theatrical syndicate. Concrete and steel will form the principal part of the construction. Marshall & Fox, of Chicago, the architects, will model the new playhouse after the Nixon, in Pittsburg. The seating capacity will exceed 2,000 persons.

PHILADELPHIA, PA.—Bids are asked by H. D. Dagit, 435 Chestnut St., until April 10, for constructing a church at 47th St. and Springfield Ave., for St. Francis De Sales Roman Catholic Church.

PHILADELPHIA, PA.—J. H. Cook, City Hall, has plans for a 4-story stone and brick girls' high school building, at Broad and Wallace Sts., for the Board of Education. Estimated cost, $250,000.

WASHINGTON, D. C.—Bids were opened March 23 at the office of Elliott Woods, Supt., of the U. S. Capitol Building and Grounds, Washington D. C., for furnishing roof covering and placing same on the House of Representatives office building. Bids were on (a) 60 tons, more or less, of the highest grade soft roofing copper, 16 oz., in sheets 24 in. wide; (b) furnishing labor and materials required for placing same on the roof, bids being tabulated according to the price bid per square of 100 sq. ft., the total area being estimated at 1,100 squares; (c) furnishing the copper and placing same on roof. Bids were as follows: U. T. Hungerford Brass & Copper Co., 510 Arch St., Philadelphia, (a) 29.6 cts. per pound; J. H. Jolley & Co., 42 North Fifth St., Philadelphia, (a) 29.95 cts.; Clendenin Bros., Caroline St., Baltimore, (a) 30 cts.; Gummey, McFarland & Co., 151 North Tenth St., Philadelphia, (a) 35.25 cts.; Merchant & Evans Co., 517 Arch St., Philadelphia, (a) 30.25 cts.; A. P. Swoyer & Co., 17 North Seventh St., Philadelphia, (a) 31.2 cts.; David Lupton's Sons Co., Allegheny and Tulip Sts., Philadelphia, (a) 32 cts.; (b) $10 per square; (c) $40 per square; Warren M. Whyte, 304 Thirteenth St., Washington, D. C., (b) $6 per square; William E. Robertson, Belhaven, N. C., (b) $9.35; O. L. Wolfsteiner Co., 1313 W St., N. W., Washington, (b) $9.98; American Standard Fireproofing Co., 222 4½ St., N. W., Washington, (b) $10.03.

BALTIMORE, MD.—D. E. EVANS & CO., Church St. and Dark Lane, has secured contract for constructing car barn at Gay St. and North Ave. for the United Railways & Electric Co. The structure will be of concrete and steel, one story, 280 × 300 ft., and will cost $150,000.

ATHENS, GA.—The MILES & BRADT CO., Austell Bldg., Atlanta, Ga., has contract to erect building for Southern Mutual Insurance Co. Building will be 60 × 134 ft., seven stories and basement, concrete skeleton, fireproof, direct steam heat, electric elevator, electric and gas lighting. Cost, $250,000. Harralson Bleckley is Arch., 619 Empire St., Atlanta.

FORT MORGAN, ALA.—Bids are asked until 2 p. m., April 17, by Lieut. Louis F. Garrard, Jr., Constr. Q. M., for repairing 22 buildings at this post. (Advertised, Engineering News.)

NEW ORLEANS, LA.—The Equitable Real Estate Co., 220 Carondelet St., has awarded contract to W. T. CAREY & BRO., 630 Camp St., for a 5-story building to cost $130,000, 166 × 120 ft., direct electric lighting and elevators. Audrey & Bendernagel, 706 Tulane-Newcomb Bldg., are Archs.

The Auburn Hotel Co. is arranging to erect a hotel to cost $2,000,000.

FRANKLIN, LA.—We are officially advised that bids will be received about April 15 for constructing a 3-story brick, Bedford stone and terra-cotta court-house at Franklin, for the parish of St. Mary. The building will be 154 × 110 ft., and will cost $115,000. The F. B. Hull Co., Franklin, are Archs.

LOUISVILLE, KY.—W. L. Labb, Gen. Mgr., White City, has announced that plans are being prepared for a combined theater and office building, to be erected by the White City Co. Cost, $250,000. To be ready to open next season.

The following bids were received March 21 by Board of Public Works for construction of annex to City Hall: Lortz & Frey Planing Mill Co., $158,863; J. N. Struck & Bro., $157,000; Rommel Bros., $154,998; Jacob Bornstein, $146,785; J. W. CONNOR (awarded contract), $141,307.

CINCINNATI, OHIO.—Werner & Adkins, 77 Mitchell Bldg., have awarded the contract to the DAVID HUMMEL BUILDING CO. for a bank and office building for the Second National Bank. Estimated cost, $300,000.

Gustave Drach, Arch., Union Trust Bldg., is preparing plans for the new Woodward High School. These will hardly be ready for three months. The new building is to cost $400,000.

We are officially advised that the U. S. Engineer Department is preparing plans for a concrete steel store house, 40 × 60 ft., to be built on cement pile foundation. Col. McD. Townsend is in charge.

LAFAYETTE, IND.—Bids are asked until 3 p. m., May 7, by James Knox Taylor, Superv. Arch., Washington, D. C., for construction, including plumbing, heating and electrical work, of an extension to the U. S. post-office at Lafayette. (Advertised, Engineering News.)

CHICAGO, ILL.—J. W. SNYDER, 160 Washington St., has general contract for constructing a mercantile building to be built on the east side of LaSalle St., south of 22d St., for William N. Eisendrath, for the Troy Laundry Machine Co., lessee, whose plant adjoins the site of the proposed building. It will be 5-story, 250 × 116 ft., of mill and brick construction and cost $200,000. The sub-contracts were let as follows: Carpentry to MORRICE & BARRON, 125 LaSalle St.; plumbing to M. J. CORBOY, 78 Dearborn St.; heating to KEHM BROTHERS & CO., 228 Kinzie St.; iron work to the VIERLING McDOWELL CO., 23d St. and Stewart Ave.; roofing to McDOWELL & WILDER, 952 West Twelfth St., and painting to GEORGE ERHARDT, 138 Washington St. Mundy & Jensen, 171 LaSalle St., are Archs.

Andrew Sandegren, Arch., 164 Dearborn St., has completed plans, it is reported, for a 35-apartment building, to be erected at 35th St. and Grand Blvd., for Krietenstein Bros., 107 Dearborn St. The building is to be three stories high, 149 × 162 ft., built of press brick and stone trimmings, with plate glass, oak and mahogany finish, oak and maple floors, marble, tile and mosaic, combination lighting fixtures, mantels and consoles, nickel plumbing and sheet metal work. Cost, $120,-000. Bids will be received by owners.

CHICAGO, ILL. — William J. Brinkman, Arch., Metropolitan Block, is completing plans and will take figures on a church to be built at 83d St. and Bond Ave., for St. Michael's Roman Catholic Church (Polish). It will be 95 × 200 ft., in Gothic style, of fireproof steel construction, with two towers, one on each side of the entrance, the highest to be 280 ft. The structure will be of pressed brick and stone, having stained glass windows, slate or tile roof carried on steel trusses, steam heat, wiring for electric light, marble and tile work, a seating capacity of 2,000 and will cost complete $200,000.

Nimmons & Fellows, Archs., 204 Dearborn St., have let general contract to H. EILENBERGER & CO., 153 LaSalle St., for constructing an 8-story brick and mill constructed mercantile building, 80 × 120 ft., to be erected at the corner of Fifth Ave. and Congress St., for Carter & Holmes, 207 Jackson Blvd. Cost, $150,000.

Plans have been prepared by C. A. Eckstrom, 131 LaSalle St., for a warehouse building, to be erected at 16th and State Sts., for Siegel, Cooper & Co., State and Van Buren Sts. The building will have eight stories and will be 151 × 200 ft., built of brick, mill construction, with tar and gravel roof, electric light fixtures and nickel plumbing. Cost, $250,000.

FORT DODGE, IOWA.—Liebbe, Nourse & Rasmussen, Archs., 724 Walnut St., Des Moines, have prepared plans for a 7-story bank building, 80 × 140 ft., for the First National Bank. Estimated cost, $125,000.

DES MOINES, IOWA.—Plans are being prepared by Hallett & Rawson, 615 Walnut St., for theater to be erected at Eighth and Mulberry Sts., for the Lederer & Strauss Co., and the Carl Kahler Estate, to cost about $150,000.

OMAHA, NEB.—Plans for a Y. M. C. A. building, to cost $125,000, at 17th St. and St. Mary's Ave., are finished. Thos. L. Kimball is Arch., McCague Block.

FORT D. A. RUSSELL, WYO.—It is reported that plans have been completed for a military hospital to be erected at a cost of $125,000 at this post. Capt. V. K. Hart, Cheyenne, is Constr. Q. M.

ST. LOUIS, MO.—Plans for the St. Francis de Sales Roman Catholic Church, to be erected at Ohio Ave. and Lynch St., have been filed. Cost, $200,000. V. J. Klutho, 202 North Ninth St., is the Arch.

F. C. Bonsack, Tobin Bldg., has prepared plans and will take bids soon for a 12-story hotel and theater, 127 × 118 ft., for the American Amusement Co., to be erected at Seventh and Market Sts. Brick, stone, terra-cotta and reinforced concrete, structural iron and steel work will be used for construction, with iron cornices and skylights, fireproofing, marble and tile work, hard plaster, composition roof, gas and electric fixtures, water closets, washstands, bath tubs, etc. Cost, $500,000.

KANSAS CITY, MO.—Montgomery, Ward & Co., Michigan Ave., Chicago, Ill., contemplate erecting building here after plans by John W. McKenzie. The structure will have nine stories and basement, will be reinforced concrete throughout, including columns, girders, floors, stairways and roof, exterior of brick veneer, 159 × 178 ft., having four freight elevators, three passenger elevators, four stairways, 200 HP. boilers, two engines and generators, switchboard for power, light and heat, sprinkling system with 35,000-gallon water tank on top of building. Company also plans erecting a second structure, similar to above, to be completed within three years, making the total investment about $1,000,000.

DENVER, COLO.—The Theological Seminary Trustees of the Roman Catholic Diocese of Colorado, it is reported, propose erecting a $200,000 building. Rev. J. J. Martin is interested.

Bids are asked by James Knox Taylor, Superv. Arch., Washington, D. C., until 3 p. m., May 15 (extension of time), for constructing extension to, remodeling, etc., the U. S. post-office and court-house at Denver.

SPOKANE, WASH.—James Knox Taylor, Superv. Arch. of the Treasury, Washington, has awarded to WILLIAM H. MAXWELL, Deadwood, S. Dak., contract for the construction of the post-office at Spokane, Wash., at the net price of $405,865, a deduction of $12,885 from his bid, on account of using terra-cotta in place of stone in certain parts of the building.

The Spokane Club proposes to erect a 6-story building on Riverside Ave., near Monroe St., to cost $200,000. J. H. Spear is Pres.

LOS ANGELES, CAL.—Work on the foundation of the new Y. W. C. A. is completed and erection of the structure on the west side of Hill St., north of Third, will be started at once. The building will cost over $150,000 and will be six stories high. The building committee has now under consideration the contract for the steel work. This and other contracts will soon be let.

BERKELEY, CAL.—The Board of Education is reported to have adopted plans for the high school to be erected at Allstonway and Grove Sts., at a cost of $140,000.

SAN FRANCISCO, CAL.—The Orpheum Circuit Co. will build a theater building on its old site, the south side of O'Farrell St., between Stockton and Powell Sts. It has applied for a permit from the Board of Works. The theater will cost $172,500.

SACRAMENTO, CAL.—Plans, specifications and estimates of cost for the erection of a new modern county court-house will be received until April 22 by the Board of County Supervisors. The court-house is to be built in connection with a county jail, plans for which have heretofore been adopted; amount authorized not to exceed $400,000. The architect whose plans are adopted will receive a $500 premium. H. K. Johnson is Chan.

RENO, NEV.—The contract for erection of the new Odd Fellows building, at the corner of Second and Center Sts., has been awarded to SELF & SELLMAN at a cost of $126,475.

SALT LAKE CITY, UTAH.—Plans are being prepared for a hotel to be built for Samuel Newhouse, Dooly Block, Salt Lake City.

OGDEN, UTAH.—James Knox Taylor, Superv. Arch. of the Treasury, Washington, D. C., has awarded to the OTIS ELEVATOR CO., 17 Battery Pl., New York, contract for furnishing electric elevator at Ogden, Utah, at $5,790.

WINNIPEG, MAN.—E. M. Counsell has purchased a Main St. site for a syndicate, upon which they will erect an office building to cost $250,000.

SASKATOON, SASK.—Mansell & Watson are having plans prepared for a modern apartment block, to cost $200,000.

TORONTO, ONT.—The A[illegible] Rink Co. will spend $150,000 this sum[illegible] on the erection of a new ice skating ri[illegible]

The T. Eaton Co., retail [illegible] goods, have plans for an addition to its [illegible]ding to cost $170,000.

The Confederation Life [illegible]iation has plans for an 8-story fireproo[illegible] ice building, to be erected at the corner of [illegible]en and Victoria Sts. Cost, $200,000.

## WATER SUPPLY—IR[illegible]GATION.

SWANTON, VT.—Fred. C[illegible]rons is interested in purification of [illegible] Perrygreen water-works system.

NEW YORK, N. Y.—Bids a[illegible]ked by the Department of Water Supply, [illegible] and Electricity, John H. O'Brien, Co[illegible] until 2 p. m., April 10, for hauling an[illegible]ying 12-in. water main in Tremont Ave, [illegible]ween Morris and Anthony Aves., Boro. of [illegible] Bronx.

The Board of Water Suppl[illegible] awarded contract for constructing port[illegible] of Catskill Aqueduct, aggregating 10.73 m[illegible] in length, to the THOMAS McNALLY C[illegible] Pittsburg, Pa., at $4,126,423. The prin[illegible] items of the engineer's estimate of the [illegible]ork are as follows: Excavation in open cu[illegible] 658,300 cu. yds.; refill and embankment, 6[illegible]00 cu. yds.; excavation and replacing of to[illegible]oil for surface dressing, 137,000 cu. yd[illegible] excavation in tunnels, 170,000 cu. yds.; [illegible]ncrete masonry for aqueduct in open cu[illegible] 211,000 cu. yds.; concrete masonry in tun[illegible] 45,000 cu. yds.; Portland cement, 340,00[illegible] bbls.; steel for reinforcing concrete, 125,0[illegible] lbs.; stone boundary walls, 84,000 lin. f[illegible] fences and guard rails, 63,000 lin. ft. Adv[illegible]rtised, Engineering News Feb. 21 to March [illegible] J. Waldo Smith is Ch. Engr.

ALBANY, N. Y.—Bids are [illegible]ed by the Board of Contract and Supply, [illegible]efore Wachsman, Clk., until 3 p. m., May 6, for constructing preliminary filters. The work consists of constructing 16 reinforced concrete filter tanks each 54 ft. long by 18 ft. wide, with operating gallery, pumping station and apputenances. Wallace Greenalch is Engr. and Supt., Bureau of Water. (Advertised, Engineering News.)

NEW YORK, N. Y.—The Department of Water Supply, Gas and Electricity has awarded contract for constructing and remodeling Ridgewood Pumping Station, north side of Atlantic Ave., between Logan and Chestnut Sts., Boro. of Brooklyn, to FULLER & O'CONNOR, 26 Court St., Brooklyn, at $302,000.

ALBANY, N. Y.—In a statement given out on March 29th, by Wallace Greenalch, Supt. of the Water Bureau, with regard to the proposed improvements to the city's water supply system, for which a bond issue of $400,000 has been authorized, he says: "Based on the experience gained with the test filters during the past 18 months, plans and specifications have been prepared for the construction of 16 preliminary filters, each 54 ft. long, 18 ft. wide, and having an effective filtering area of 810 sq. ft. Each filter will have a filtering capacity of from 1,500,000 to 2,000,000 gallons a day, depending on the rate at which it is run, and the entire plant will be capable of filtering from 24,000,000 to 30,-000,000 gallons per day. The filters will be arranged in a continuous row along the northerly side of the present sedimentation basin, and be provided with an operating gallery along the southerly ends of the filters. A new pumping station will be constructed at the easterly end of the operating gallery and adjoining the present pumping station. The settled water will be pumped through a vertical height of 9 ft. from the sedimentation basin on to the preliminary filters by means of 30-in. centrifugal pumps of 30,000,000 gallons daily capacity, direct connected to cross-compound condensing engines of 80 HP. When these filters become clogged they will be washed by an upward current of water pumped by means of 15-in. centrifugal pumps of 10,000,000 gallons daily capacity, direct connected to double simple engines of 110 HP., exhausting into a closed feed water heater. Both the settled water and the wash water pumps will be furnished in duplicate. A third 18-in. centrifugal pump of 16,000,000 gallons daily capacity, and a cross-compound condensing engine of 80 HP., will be placed in the present pumping station to supplement the two present pumps and allow reserve capacity. All of the five centrifugal pumps and engines, and the two jet condensers will be furnished by the CAMDEN IRON WORKS, to whom the contracts were recently awarded.

"Specifications for three new water tube boilers, each of 250 HP., have been prepared, and will soon be advertised. The preliminary filters will be constructed throughout of concrete reinforced with twisted steel bars, while the new pumping station will have a pressed brick exterior to match the present pumping station. The water, after filtering through preliminary filters, will flow by gravity on to the present slow sand filters, which will be operated at double their present rate, thus doubling the capacity of present filtration plant. No alum or other chemical coagulent will be used on the preliminary filters or elsewhere in the process of filtration. Compared with building eight more slow sand filters of the same size as the present filters, it is estimated that the construction of preliminary filters will make a saving in first cost to the city of at least $250,000, while the annual expense of operating the preliminary filters will not exceed the expense of operating eight more slow sand filters. When the superior quality of the doubly filtered water and the greater facility of operating the slow sand filters are considered, preliminary filters are much to be preferred. The construction of the filters will be awarded in one contract, valves in a second contract, cast-iron pipe and special castings in a third contract, and brass strainers and piping in a fourth contract. It is expected that all the work will be completed and the filters placed in operation by fall." The Board of Contract and Supply, Isidore Wachsman, Clerk, will have charge of the advertising. Walter Melius is City Engr.

WALDWICK, N. J.—A reservoir may be constructed in Bergen County, between Undercliff and Waldwick, to supply water to Waldwick, Allendale, Mahwah and surrounding villages. The water will probably be taken from Saddle River.

BAYONNE, N. J.—See under Streets and Roads.

BRADFORD, PA.—Bids are asked by the Board of Water Commissioners until 5 p. m., April 15, for constructing concrete distributing reservoir and furnishing and laying about 470 tons of c.-i. pipe. W. D. Singleton is Clk. Knight & Hopkins, at Rome, N. Y., are Engrs. (Advertised, Engineering News.)

BUTLER, PA.—The Butler Water Co. will spend $100,000 in improving plant and adding to its capacity.

PHILADELPHIA, PA.—Bids are asked by John R. Hathaway, Dir. Pub. Wks., until noon, May 2, for completing Torresdale Pumping Station and Court No. 3, at Torresdale Filter Plant. (Advertised, Engineering News.)

TOWSON (Baltimore post-office), MD.—Dixon C. Walker has been appointed chairman of commission to consider plans for incorporating company to purchase or lease present artesian well supply from Baltimore County Water Co., furnishing Towson and Lutherville, Md., with water. If these plans prove successful, it is proposed to bore wells or pipe spring water to Towson from some distant point.

WASHINGTON, D. C.—Bids were opened March 30 at the Bureau of Yards and Docks, Navy Dept., Washington, for construction of 100,000-gallon water tower and tank at Naval Hospital, New Fort Lyon, Bent County, Colo., as follows. Midland Bridge Co., Kansas City, Mo., $8,782; Des Moines Bridge & Iron Co., Des Moines, Iowa, $10,900; Chicago Bridge & Iron Co., 105th and Throop Sts., Chicago, $10,560.

LAURINBURG, N. C.—A water-works and sewerage system will soon be constructed. J. M. Bandy, Greensboro, N. C., is Engr.

HARTSVILLE, S. C.—Bids are asked by the Public Works Commission until May 1 for constructing water-works, consisting of approximately artesian well, steam pumps, electric pumps, reinforced concrete reservoir, steel tank and tower and three miles of cast-iron mains from 6 to 10 ins. in diameter. J. J. Lawton is Chn. Charles C. Wilson, 1302 Main St., Columbia, S. C., is Consult. Engr.

MACON, GA.—A 25,000,000-gallon reservoir has been recommended by the Committee on Fire Prevention of the National Board of Fire Underwriters, of 135 William St., New York City. The committee also recommends duplicate supply mains between the proposed reservoir and the city and two 12-in. reinforcing mains for the distributing system. The works are owned by the Macon Gas Light & Water Co., of which A. C. Blinn is Gen. Mgr.

HOMER, LA.—A water-works system is being considered by the Town Council.

NEW ORLEANS, LA.—Bids are asked by the quartermaster, Jackson Barracks, New Orleans, La., until 11 a. m., April 16, for reconstructing portion of water distributing system.

ESTHERWOOD, LA.—The Abbott Bros. Canal & Improvement Co. will rebuild pumping plant recently destroyed by fire.

LEWISBURG, TENN.—The city contemplates constructing water-works system. Estimated cost, $45,000.

NASHVILLE, TENN.—Contracts for different parts of work of erecting addition to pumping station in accordance with plans and specifications prepared by C. K. Colley have been awarded to the following contractors: Foundation and excavation, E. T. LEWIS CO., $17,262; concrete work, E. T. LEWIS CO., $17,261; steel work, NASHVILLE BRIDGE CO., $845; brick work, J. H. HUTCHINSON & SON, $3,295. W. W. Southgate is City Engr.

LEESBURG, OHIO.—Bids are asked by the Board of Public Affairs until April 9 for constructing water-works. W. H. Mason is Clk.

MILROY, IND.—A water-works system may be constructed.

EVANSVILLE, IND.—The Board of Public Works is considering plans for constructing water-works filtration plant. James D. Saunder is City Engr.

SAGOLA, MICH.—THOMAS CAREY, of Ohio City, has secured contract for installing water-works system.

NEWMAN, ILL.—A water-works system may be installed.

EAST ST. LOUIS, ILL.—W. J. Cracken has been appointed Ch. Engr. and Wilford A. Thompson Asst. Engr. by the Board of Drainage Commissioners, Drainage Dist. No. 1, St. Clair County. Plans are being prepared to drain about 25,000 acres of land south and east of East St. Louis. Estimated cost, $200,000.

GARNER, IOWA.—Bids are asked by Thomas Duff, County Audr., until 2 p. m., April 29, for construction of ditches in District No. 15. There are eight sections of tile work, ranging from 8-in. to 24-in., aggregating 22,500 ft. in length.

SIBLEY, IOWA.—Bids are asked by the County Supervisors until noon, April 15, for construction of Drainage Dist. No. 4. The work consists of laying about 1,000 ft. 10-in. tile, 9,000 ft. 12-in. tile, 3,200 ft. 15-in. tile and 3,000 ft. 20-in. tile. There will be an open ditch 2,300 ft. in length requiring removal of about 1,374 cu. yds. of dirt. Victor A. Burley is County Audr.

OSCEOLA, IOWA.—SMITH & SON have secured contract for furnishing and laying 4,000 ft. 6-in. water pipe in 5-ft. trench, including eight hydrants and two valves, at $4,119. W. M. Temple is City Clk.

SIOUX CITY, IOWA.—The Board of Water-Works Trustees has awarded contract for furnishing and erecting complete on foundation one 6,000,000-gallon vertical triple expansion pumping engine and one battery of boilers and chimney for same at Main St. pumping station, to the HOLLY MFG. CO., 118 Liberty St., New York, at $55,750. J. M. Lewis is City Engr.

PEQUOT, MINN.—The city will construct system of water-works.

MITCHELL, NEB.—Bids are asked by the U. S. Reclamation Service, until 2 p. m., May 21, for constructing about 114 miles of lateral ditches, in connection with the North Platte Project, Neb.-Wyo. The work involves excavation of about 650,000 yds. of earth and 14,000 yds. of loose and solid rock. (Advertised, Engineering News.)

ARCADIA, NEB.—A water-works system will soon be constructed.

ELGIN, TEX.—W. H. Rivers has been granted franchise to construct water-works system. He will organize a stock company and work will begin at an early date.

HOUSTON, TEX.—The city will equip water plant with air-compressor costing $17,337 and three boilers costing $10,264. I. Austin Miller is City Engr.

NACODOCHES, TEX.—A water-works system will be constructed.

SANTA ANNA, TEX.—A water-works system may soon be constructed.

POTEAU, IND. T.—The contract for constructing water-works system has been let to the O'NEIL ENGINEERING CO., 845 Wilson Bldg., Dallas, Tex.

McALESTER, IND. T.—The city has let contract for building water-works and sewerage extension to J. J. DUNNEGAN, Shenandoah, Iowa, at $25,623. George Wilcox is City Engr.

CORTEZ, COLO.—The Board of Directors of the Montezuma Valley Irrigation District has awarded contract to the EMPIRE CONSTRUCTION CO. for enlarging water-works of the Montezuma Water & Land Co. The work includes constructing two storage reservoirs and will be completed May 1, 1908.

TRINIDAD, COLO.—The waters of Smith Canon, 20 miles west of here, will be stored in a private reservoir to be constructed by Cecil E. Snyder and W. R. Murphy, of Las Animas, at cost of $30,000. The reservoir will hold 200,000,000 cu. ft. of water. The object of the promoters is to sell water for irrigation and other purposes to residents of Primers.

MABTON, WASH.—Water-works system will be constructed.

ENTERPRISE, ORE.—A water-works system may be constructed.

SACRAMENTO, CAL.—George Randle, City Surv., has been instructed to prepare plans and specifications for constructing complete filtration plant.

ROSEVILLE, CAL.—The city will install water-works system.

AMERICAN FORK, UTAH.—Bids are being received by the City Council for constructing water-works system.

SALT LAKE, UTAH.—We are officially advised that the following bids were received March 16 by the Board of Public Works for (A) constructing water mains during the present year, (B) constructing c-i. water supply mains and (C) continuous wooden stove pipe mains. (A) J.W. Percival, $119,593; P. J. Moran, $129,143; Hanley & Ritchie, $132,815; Midgley Bros., $133,372, and James Kennedy, $138,295, all of Salt Lake City. (B) P. J. Moran, $231,343; Hanley & Ritchie, $241,545, and Midgley Bros., $243,958. (C) P. J. MORAN, $145,991 (awarded contract); Hanley & Ritchie, $164,768, and Midgley Bros., $165,635. Itemized bids are given this week under Contract Prices. Louis C. Kelsey is City Engr.

RICHMOND, QUE.—Bids are asked by E. F. Cleveland, Secy.-Treas., until noon, April 20, for trenching and laying water pipes, placing hydrants, etc., B. D. McConnell is Engr.

THOROLD, ONT.—Bids are asked by D. J. C. Munro, Town Clk., until 8 p. m., April 23, for furnishing material and constructing water-works, comprising pipe-laying, water pipes, hydraulic pumping machinery, power-house, water tower, sedimentation basin, etc. Willis Chipman, 103 Bay St., Toronto, Ont., is Ch. Engr.

SIMCOE, ONT.—Bids are asked by W. C. McCall, Town Clk., until 8 p. m., April 19, for (C) steel water tower; (D) cast-iron pipes and specials, about 500 tons; (E) fire hydrants, gate, valves, etc.; (G) two power pumps; (H) two gas engines, each 50 HP. Willis Chipman, 103 Bay St., Toronto, Ont., is Ch. Engr.

MAPLE CREEK, SASK.—Bids are asked by Arthur Burnett, Town Clk., until 5 p. m., April 20, for furnishing material and constructing (A) supply main, intake chamber and collecting pipes; (B) distributing system, and (C) reinforced storage and compensating reservoir. Galt & Smith, 23 Jordan St., Toronto, Ont., are Ch. Engrs.

SASKATOON, SASK.—The SASKATOON CONSTRUCTION & ENGINEERING CO. has been awarded contract for laying 27,000 ft. of pipe, in connection with the municipal water-works system, at $68,777.

VICTORIA, B. C.—Bids are asked by W. W. Northcott, Pur. Agt., until 3 p. m., April 8, for installing machinery at water-works pumping station.

## SEWERAGE.

NEW YORK, N. Y.—The following bids were received March 26 by Louis F. Haffen, Pres. Boro. of The Bronx, for constructing outlet sewer and appurtenances in portions of various streets, Boro. of The Bronx: Jenks & Asserson, Brooklyn, $798,813; John C. Rodgers, 1929 Amsterdam Ave., New York, $764,232; McDonald & Barry, 767 Tremont Ave., New York, $699,055; F. V. Smith Construction Co., 147 East 125th St., New York, $656,137, and James Pilkington, Ft. Washington Park, New York, $728,254. Itemized bids are given this week under Contract Prices.

Bids are asked by John F. Ahearn, Pres. Boro. of Manhattan, until 3 p. m., April 11, for constructing sewers.

NORTH OLEAN (Olean post-office), N. Y.—The village has voted to construct sewer system. Estimated cost, $60,000.

MEDINA, N. Y.—The Board of Sewer Commissioners has let contract for laying trunk line sewer at bottom of canal from Church to West Sts. to MARTIN J. SCANLON, at $9,850. Work to be completed by April 15.

SCHENECTADY, N. Y.—The Board of Contract and Supply has awarded contracts for constructing sewers in Cotton Factory Hollow for $108,000, and the New York Central Lines outlet sewer in Ninth Ward for $124,000 to KELLAM & SHAFFER. L. B. Sebring is City Engr.

BAYONNE, N. J.—See under Streets and Roads.

RIDLEY PARK, PA.—Bids are asked by W. P. Anthony, Ch. Burgess, until 6 p. m., April 9, for constructing 10-in. terra-cotta pipe sewer from Harrison and Rogers Sts. to connect with sewer about to be constructed on Free St., which will connect with outfall sewer on Ridley Ave.

ROCKHILL, S. C.—The Solomon-Norcross Co., 1621 Candler Bldg., Atlanta, Ga., has been appointed to prepare plans and specifications for constructing sewerage system at Rockhill. Estimated cost, $50,000.

TROY, ALA.—Bids are asked until April 16 for laying 7,000 ft. of 8 to 10-in. sanitary sewers with manholes, flush-tanks, etc. John Gamble is City Clk. and Treas.

KNOXVILLE, TENN.—The Board of Public Works has awarded contracts to JAMES HANNIFIN, CHARLES T. HEINS, J. A. AHLER PLUMBING CO. and ARTHUR J. WARDREYS, for constructing 23 sewers. Total cost, $15,226. W. C. Crozer is City Engr.

YOUNGSTOWN, OHIO.—Bids are asked by the Trustees of Belmont Park Cemetery Association, F. G. King, Secy., until April 10, for laying about 6,500 ft. of underdrain.

WARREN, OHIO.—JOHN KINSMAN has been awarded contract for constructing 12-in. lateral sewer in Hall Ave. E. M. Milligan is City Engr.

STEUBENVILLE, OHIO.—FERRY BROS. & CO., of Crafton, Pa., have secured contract for constructing sewer system, at $15,000.

MASSILLON, OHIO.—The Board of Public Service has let contract to SCHOTT & KRAFT for constructing sanitary sewers. Harold Howland is City Engr.

TERRE HAUTE, IND.—WILLIAM T. FRLER has been awarded contract for constructing 60-in. brick sewer in Ohio St., from Tenth to 19th Sts., at $7,260. Edgar Schmidt is City Engr.

EVANSVILLE, IND.—The Board of Public Works has let contracts to NEWMAN & VINEYARD for constructing sewers in Walnut St. and First Ave. James D. Saunder is City Engr.

BAY CITY, MICH.—We are officially advised that PETER PETERSON has been awarded contract for constructing 5,935 ft. 36-in. concrete sewers at $11,780. NICK MEAGHER secured contract for laying 3,135 ft. 36-in. concrete sewers, at $6,460. H. C. Thompson is City Engr.

DETROIT, MICH.—As a result of Gov. Warner signing the bill annexing Fairview to the city the Council will at once instruct Robert H. McCormick, City Engr., to prepare approximate estimates for extending Fairview sewer from Connor's Creek to the present Jefferson Ave. city sewer.

POLO, ILL.—We are officially advised that the Board of Local Improvements has awarded contract for constructing outlet sewer to STOLTZ & GASS, Bellville, Ill., at $26,400. Bids were also submitted by the following: Dailey & Brown, Jacksonville, Ill., $26,724; George M. King, Des Moines, Iowa, $28,928; Andrew Thompson, Racine, Wis., $30,654; Jackson & Dearborn, Stone City, Iowa, $29,100; M. H. McGovern, 404 Chamber of Commerce Bldg., Chicago, Ill., $31,577, and Independent Construction Co., Davenport, Iowa, $30,190. Itemized bids are given this week under Contract Prices. DAILY & BROWN, Jacksonville, Ill., were awarded contract for constructing purification plant, at $10,775. Bids were received as follows: Stoltz & Gass, $11,400; M. H. McGovern, $12,108, and Independent Construction Co., $16,752. J. A. Davison is City Engr.

WINNETKA, ILL.—Bids are asked by Edward C. Kohler, Pres. Board of Local Improvements, until 7 p. m., April 9, for constructing system of storm water sewers. The approximate quantities are as follows: 8,875 ft. of 10-in.; 2,400 ft. 12in.; 700 ft. 15-in.; 340 ft. 18-in.; 1,833 ft. 24-in. sewer; 950 ft. 3-ft. by 4-ft. concrete sewer; 1,320 ft. 3-ft. by 5-ft. concrete sewer; 63 catch basins; 43 manholes; 520 junctions; 80 slants; 1 concrete end wall, 6 cu. yds.; 152-ft. box culvert; 440-ft. open box drain.

VANDALIA, ILL.—Bids are asked by Albert & Roe, Attorneys, until noon, April 16, for constructing main ditch and laterals, aggregating approximately 157,150 cu. yds. P. E. Fletcher is Engr.

WATERTOWN, ILL.—The STONER CONSTRUCTION CO. has been awarded contract for constructing reinforced concrete sewer outlet, at $7,982. Work to be complete by Sept. 1.

BEMENT, ILL.—Plans, specifications and estimates for constructing sewerage system have been prepared by the Iowa Engineering Co., of Clinton, Iowa.

FOND DU LAC, WIS.—S. H. Cole submitted lowest bid for constructing sewers on Park and Western Aves. James McCabe was lowest bidder for laying Merrill St. sewer. L. A. Pettibone is City Engr.

BURLINGTON, IOWA.—Bids for constructing Locust St. sewer, 11,003 ft. long, were opened March 18, as follows: R. K. Smith, Muscatine, $3.11 per lin. ft.; Young & Bouscher, Burlington, $2.96 per ft.; BURLINGTON CONSTRUCTION CO. (awarded contract), Burlington, $2.94 per ft. and McCarty Improvement Co., Davenport, $3.04 per ft. J. F. Winters is City Engr.

GALENA, KAN.—Bids are asked by H. B. March, City Clk., until April 15, for constructing sewer system.

PITTSBURG, KAN.—W. W. COOK & SON, of Junction City, Kan., have been awarded contracts for constructing sewer in District No. 3, at $70,970, sewer lateral No. 9-B, at $10,281, and laterals Nos. 7 and 10-B, at $10,047. B. D. Fox is City Engr.

ABERDEEN, S. DAK.—CASPER LEPPER, of Minneapolis and Aberdeen, has been let contract for constructing septic tanks in connection with sewer and water system.

GALVESTON, TEX.—Bids are asked by the Board of Commissioners until April 11, for constructing 21,410 lin. ft. of 8, 10 and 12-in. vitrified pipe sewer laterals. C. G. Wells is City Engr.

RITZVILLE, WASH.—A septic tank sewer system may be constructed.

SPOKANE, WASH.—Bids are asked by the Board of Public Works until April 11, for laying trunk sewers in First Ward Sewer District No. 4. Charles McIntyre is City Engr.

SACRAMENTO, CAL.—The CLARK & HENRY CONSTRUCTION CO. has secured contract for constructing sewers. George Randle is City Surv.

SALT LAKE CITY, UTAH.—We are officially advised that the following bids were received March 16 by the Board of Public Works for constructing pipe sewers during the present year: JAMES KENNEDY, $282,728 (awarded contract); Hanlon & Ritchie, $296,901, and P. J. Moran, $300,233. Bidders are all of Salt Lake City. Itemized bids are given this week under Contract Prices. Louis C. Kelsey is City Engr.

BRAMPTON, ONT.—Bids are asked until April 30 for furnishing material and constructing system of sewers. Willis Chapman, 103 Bay St., Toronto, Ont., is Engr.

WETASKIWIN, ALTA.—PARADIS & THOROLD have secured contract for constructing sewerage system and water-works. Cost, $150,000.

## GARBAGE DISPOSAL.

NEW YORK, N. Y.—Specifications and form of contract are being prepared by the Department of Street Cleaning for final removal of all ashes, street sweepings, etc., of the Borough of Brooklyn. The contract to go into effect on or about October 28. M. Craven is Comr. (Advertised, Engineering News.)

WEST ORANGE (Orange post-office), N. J.—The Town Council has awarded contract to JAMES McINTYRE for removing garbage at $116 per month.

PITTSBURG, PA.—The contract for collecting city garbage for the ensuing year is reported awarded to the American Reduction Co. at $180,000.

PHILADELPHIA, PA.—John R. Hathaway, Dir. Dept. Pub. Wks., March 29 awarded contracts for sprinkling streets as follows: First Dist., JAMES IRWIN, $6.45 per wagon per day; Second Dist., MILES McGEEHAN, $6; Third Dist., DAVID McMAHON, $7.50; Fourth Dist., R. P. BENNIS, $7.80.

NORFOLK, VA.—The Board of Control has let contract for constructing crematory to the DeCARIE MFG. CO., of Toledo, Ohio, at $29,600.

BIRMINGHAM, ALA.—Bids are asked by Julian Kendrick, City Engr., until April 17, for constructing garbage disposal plant.

DUBUQUE, IOWA.—Bids are being received by the City Health Department for hauling garbage and cleaning vaults. James H. Bryce is City Engr.

WACO, TEX.—The city contemplates installing garbage crematory.

## STREETS AND ROADS.

HOLYOKE, MASS.—Bids are asked by the Board of Public Works, Michael F. Walsh, Chn., until 1.30 p. m., April 16, for paving about 10,000 sq. yds. with vitrified paving bricks or blocks. James Tighe is City Engr. (Advertised, Engineering News.)

FALL RIVER, MASS.—WILLIAM H. BEATTIE has been awarded contract for furnishing the city 135,000 granite paving blocks, at $70 per M. The FALL RIVER QUARRY & CONSTRUCTION CO. will furnish 40,000 at $69.50 per M. W. H. BEATTIE secured the contract for furnishing 3,000 ft. of granite curbing at 76. cts. per ft. BEATTIE & WILCOX will furnish 14,000 ft. at 77 cts. per ft. The FALL RIVER QUARRY & CONSTRUCTION CO. secured contract for furnishing as many feet of return stones as may be required, at $1.26 per ft. The contract for furnishing as many feet of granite crossing stone as may be required during the present year has been let to GEORGE ROSS, at $1.18 per ft. Philip D. Borden is City Engr.

FT. ADAMS (Newport post-office), R. I.—Bids are asked by Capt Willis C. Metcalf, A. C., Const. Q. M., until 10 a. m., May 1, for constructing concrete walk and macadam road with stone gutter.

NEW York, N. Y.—Bids are asked by John F. Ahearn, Boro. Pres., until 3 p. m., April 8, for regulating, grading, curbing, etc. portions of various streets, Boro. of Manhattan.

NEW YORK, N. Y.—Bids are asked by Moses Herrman, Pres. Dept. of Parks, until 3 p. m., April 11, for furnishing and delivering limestone and limestone screenings in parks and on parkways, Boroughs of Brooklyn and Queens.

BUFFALO, N. Y.—The Aldermen have voted to grant the International Ry. Co. a 25-year franchise for the Elmwood Ave. extension on Franklin, Chippewa and other streets. In return the company will widen and pave Elmwood Ave. and Franklin St. and pave extension on Morgan St. Cost, $300,000. Thomas Pumfray, 1026 Niagara St., is Engr.

Bids are asked by the Department of Public

Works, Francis G. Ward, Comr., until 11 a. m., April 11, for paving portion of Edward, Perry and Roeder Sts., and repaving portion of Lower Terrace.

Bids are asked by the Department of Public Works, Francis G. Ward, Comr., until 11 a. m., April 10, for paving portions of Spaulding St. and Olga Pl. and repaving portions of Spring and Seneca Sts. and Linwood Ave.

BAYONNE, N. J.—Bids are asked by the City Council until 8 p. m., April 16, for furnishing material and laying about 4,700 sq. yds. brick paving, 2,400 ft. of sewers and 5,500 ft. c.-i. water pipe. W. C. Hamilton is City Clk. F. W. Dalrymple is City Engr. (Advertised, Engineering News.)

UNION, N. J.—Bids are asked until 8 p. m., April 5, for laying concrete sidewalks around the Free Public Library. H. MacPherson is Clk.

PITTSBURG, PA.—The County Commissioners March 28 awarded contracts for constructing 21 miles of macadamized roads as follows: Lowries Run and Rochester Road, FOLEY BROS., $104,520; Moon and Clinton Road, BOOTH & FLINN, LTD., $59,007; Campbell's Run Road, COLLINS-GORDON CO., $53,527; Lock No. 3 Road, COLLINS-GORDON CO., $32,964; Millerstown and Palmersville Road, COLLINS-GORDON CO., $22,007; Fairhaven and Provost Road, FOLEY BROS., $18,275.

HARRISBURG, PA.—Bids are asked by Joseph W. Hunter, State Highway Comr., until April 10, for constructing 17,100 ft. of road, 16 ft. wide, extending from Station O, at Somerset County line, to Station 171, on National Pike, in Fayette County.

READING, PA.—The Board of Public Works has awarded contracts for paving portions of Chestnut, Fourth, Sixth, Court, Buttonwood and Walnut Sts. to JOHN A. RAUEN, at $29,622. Elmer H. Beard is City Engr.

FT. DU PONT (Delaware City post-office), DEL.—Bids are asked by Capt. J. L. Knowlton, Const. Quartermaster, until 11 a. m., May 1, for constructing about 2,500 sq. yds. macadam roads and 75 lin. ft. 10-in. c.-i. culvert. (Advertised, Engineering News.)

WILMINGTON, DEL.—The State Legislature recently authorized New Castle County to issue bonds amounting to $300,000, to be spent in construction of roads. The Levy Court will probably spend one-half of this sum during the present year, and remainder the following year. In addition to this the State appropriates $10,000 each year, and the county will probably appropriate as much more, making the total expenditure about $170,000 per year during the coming two years. Surveys and preparation of plans will probably be started within the next two weeks. Francis A. Price is State Highway Comr.

FT. WASHINGTON, MD.—Bids are asked by the Constructing Quartermaster until noon, May 1, for grading and constructing macadam and gravel roads, concrete walks, and resurfacing roads.

BALTIMORE, MD.—Bids are asked by the Highway Commission until noon, April 11, for grading and macadamizing about five miles of roads.

Bids are asked by W. W. Crosby, Ch. Engr. Maryland Geological Survey Commission, until noon, April 10, for grading and macadamizing about 3.25 miles of road.

SALISBURY, MD.—Bids are asked by the Council, Henry J. Byrd, Clk., until 8 p. m., April 29, for grading, paving and draining portions of various streets. The work consists of approximately the following quantities: 15,000 sq. yds. vitrified fire clay, shale block or Warren Bros.' bitulithic pavement; 10,000 ft. reinforced concrete curb; 1,650 ft. 18-in., 1,400 ft. 15-in. and 300 ft. 12-in. drains, with 29 storm water inlets and 12 manholes. T. Chalkley Hatton, at Wilmington, Del., is Consult. Engr. (Advertised, Engineering News.)

WASHINGTON, D. C.—Bids were received March 30 by the District Commissioners for paving for year ending June 30, 1908. The following bids were received on sheet asphalt: Barber Asphalt Paving Co., 26th and D Sts. N. W., Washington, standard asphalt, with 6-in. concrete base, $1.79 per sq. yd.; vitrified block, $1.44. Brennan Construction Co., 3056 K St. N. W., Washington, asphalt, $1.68; block, $1.33. Cranford Paving Co., 2620 E St. N. W., Washington, asphalt, $1.69; block, $1.23. The following bid was received for asphalt block: Washington Asphalt Block & Tile Co., South Capitol and R Sts., Washington, 5-in. blocks, with gravel base, $1.80; 4-in. blocks, with gravel base, $1.65.

FT. MOULTRIE (Moultrieville post-office), S. C.—Bids are asked by W. N. Michel, Q. M., until 11 a. m., May 1, for constructing roads and walks. (Advertised, Engineering News.)

ROCKHILL, S. C.—The contract for furnishing material and paving private streets has been let to R. A. BEALL at $1.15 per sq. yd.

SAVANNAH, GA.—Bids are asked by Harry Willink, Director of Public Works, until April 15, for furnishing the following: 3,000 lin. ft. straight curb; 1,000 lin. ft. circular curb; 3,000 sq. yds. cement sidewalks laid, and 6,000 sq. yds. vitrified brick for roadway. The brick and curbing to be delivered f. o. b. cars, Savannah.

BESSEMER, ALA.—The City Council has awarded contract to JOHN BIGLER for constructing 8,000 yds. of cement sidewalks. William Hugh McEniry is City Engr.

NEW ORLEANS, LA.—Bids are asked by Charles R. Kennedy, City Comptroller, until 1 p. m., April 8, for repaving Carondelet St., from Canal St. to Howard Ave., with asphalt or bitulithic pavement. W. J. Hardee is City Engr.

LOUISVILLE, KY.—Bids are asked by the Board of Public Works until April 12 for grading, curbing and paving 16 streets with vitrified block pavement on concrete foundation. The work consists of about 19,000 cu. yds. excavation, 27,000 sq. yds. paving. Estimated cost, $62,000. Joseph P. Claybrook is City Engr.

WILLOUGHBY, OHIO.—Bids are asked by C. C. Jenkins, Village Clk., until April 15, for paving and curbing Erie St.

YOUNGSTOWN, OHIO.—Bids are asked by the Trustees of Belmont Park Cemetery Association, until April 10, for macadamizing about 1,800 lin. ft. of roadway.

CLEVELAND, OHIO.—Bids are asked by the Board of County Commissioners, Julius C. Dorn, Clk., until 11 a. m., April 13, for grading, draining and paving portion of Brecksville Road.

SPRINGFIELD, OHIO.—The Board of Public Service has awarded contract to FAUVER & RENNICK for paving two alleys, at $9,090. W. H. Sieverling is City Engr.

NEW PHILADELPHIA, OHIO.—Bids are asked by Sam Huston, State Highway Comr., until April 23, for constructing brick surfaced highway.

COLUMBUS, OHIO.—Contracts for State highways have been awarded as follows: Wayne County, 1.03 miles macadam road, to BORMOUTH AND BABST, Crestline, for $6,789; Summit County, two miles macadam road, TAYLOR & EDGERTON, Findlay, $11,803; Licking County, 1.6 miles macadam road, to W. S. PACE, Newcomerstown, $11,873; Wayne County, DERMUTH & BABST, Crestline, $6,719; Summit County, TAYLOR & EDGERTON, Findlay, $11,804. Sam Houston is State Highway Comr.

RAVENNA, OHIO.—Bids are asked by Sam Houston, State Highway Comr., until April 16 for constructing highway.

JEFFERSON, OHIO.—Bids are asked by Sam Houston, State Highway Comr., until April 17 for constructing highway.

HILLSBORO, OHIO.—Bids are asked by Sam Houston, State Highway Comr., until April 19 for constructing highway.

LOGANSPORT, IND.—Bids are asked by the County Commissioners until April 22 for constructing gravel roads in Deer Creek, Cass and Tipton Townships. George W. Cann is County Audr.

ARCOLA, ILL.—WILLIAM LOUGH, of this city, has secured contract for paving various streets.

DETROIT, MICH.—FERDINAND PORATH & SON have been awarded contract for paving various streets. George T. Gaston is City Engr.

KALAMAZOO, MICH.—Contract for paving West North St. has been let to ROY WILLIAMS. M. C. Taft is City Engr.

LANSING, MICH.—FARRELL BROS., of this city, have been let contract for paving Franklin Ave. H. A. Collar is City Engr.

GRAND RAPIDS, MICH.—VANDERVEEN & MASSEL have secured contract for graveling Sumner St., at $6,323.

EAST ST. LOUIS, ILL.—Bids are asked until April 16 for improving Veronica Ave. The work consists of the following: 1,500 lin. ft. combination concrete curb and gutter; 2,186 yds. brick paving; 860 cu. yds. filling in excess of excavation; 150 cu. yds. excavation; 36 lin. ft. 10-in. sewer pipe; one c.-i. sewer manhole; two stone inlets, with iron covers, and 9 cu. yds. brick masonry. W. J. Crocken is City Engr.

WATERLOO, IOWA.—The W. A. BRYANT & SONS CO., of this city, has secured contract for laying about 62,000 sq. yds. of asphalt paving and 30,420 lin. ft. of curb and gutter, at $135,870. C. T. Wilson is City Engr.

ST. PAUL, MINN.—Bids are asked by the Board of County Commissioners until 10 a. m., April 15, for grading and graveling portion of Bald Eagle Lake Road. Edward G. Krahmer is County Audr.

EMPORIA, KAN.—HASKINS & RAMSAY have secured contract for paving. G. A. Matthewson is City Clk.

ST. LOUIS, MO.—Bids are asked by the Board of Public Improvements until noon, April 12, for grading, paving on concrete base, etc., various alleys. Charles M. Talbot is C. E., Bd. Pub. Impvts.

TRENTON, MO.—Bids are asked until 8 p. m., April 15, for grading, paving, curbing, guttering, etc., various streets. R. J. Pearson is City Engr.

ENID, OKLA.—The contract has been awarded to the WARNER-QUINLAN CO. for paving West Maine St. from Independence to 24th Sts., 44 ft. wide, with asphalt, at $2.29 per sq. yd.

SEATTLE, WASH.—C. T. ERICKSON, of this city, has been awarded contract for paving, grading, etc., Fourth Ave., at $278,392. R. H. Thomson is City Engr.

SALEM, ORE.—The Supervising Architect of the Treasury, Washington, D. C., has awarded to HEADRICK & HUGHES, Salem, Ore., contract for constructing approaches to the Salem post-office, at $13,170.

SAN DIEGO, CAL.—The following bids have been received for grading Albatross St.: McClinus & Brockway, $5,866; W. H. Fraser, $6,377, and John Engebretzen, $7,805. The work consists of 9,253 cu. yds. of earth and 8,852 cu. yds. of embankment. G. A. D'Hemecourt is City Engr.

SALT LAKE CITY, UTAH.—We are officially advised that the following bids were received March 16 by the Board of Public Works for (A) laying cement sidewalks during the present year, (B) laying cement sidewalk extension No. 108, (C) repairing paved streets, (D) laying stone block crosswalks: (A) S. BIRCH, Salt Lake City, $92,453 (awarded contract), and R. S. Bloome Co., 79 Dearborn St., Chicago, Ill., $101,085. (B) Johnson & Beacon, Missoula, Mont., $262,036; S. Birch, $277,646, and R. S. Bloome Co., $299,008. (C) P. J. MORAN, Salt Lake City, $11,155 (awarded contract). (D) CUSTER & BURT, Salt Lake City, $3,640 (awarded contract), and Palm & Nelson, Salt Lake City, $4,040. Itemized bids for (A) and (B) are given this week under Contract Prices. Louis C. Kelsey is City Engr.

TORONTO, ONT.—The Board of Control has let contract to the GODSON CONTRACTING CO. for paving Peter St., from King to Queen Sts., with asphalt, at $5,261.

## MANUFACTURING PLANTS.

PORTSMOUTH, N. H.—Bids are asked until 11 a. m., April 27, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for constructing a brick and steel pattern shop for steam engineering at the Navy Yard, Portsmouth. William M. Smith is Acting Ch. of Bureau. Specifications are on file at office of Engineering News, New York, N. Y.

LYNN, MASS.—Walton & Logan Co., 683 Washington St., Lynn, are having plans prepared for a 4-story shoe factory building, 250 × 50 ft. An addition will be made also to the firm's power plant, in which a steam turbine engine is set up.

EAST BOSTON (Boston post-office), MASS.—Four cotton mills of 60,000 spindles each, the entire plant to cost about $5,000,000 and to employ between four and five thousand operatives, will be erected in East Boston, in the near future by a syndicate headed by Eugene N. Foss, Pres. of the Sturtevant Blower Co., Hyde Park, Mass. As outlined the scheme is to build on 50 acres of land, which have been secured on the banks of Chelsea Creek, near the Chelsea St. bridge; this area includes abundant docking facilities. It is announced that work on the first of the four mills will be started within a few weeks, to be ready for operation not later than January, 1908. The three remaining buildings are to be constructed and opened as speedily as finished and machinery is installed.

NEW BRITAIN, CONN.—The North & Judd Mfg. Co., 500 East Main St., will erect a large addition to its foundry, from plans which are being prepared by Griggs & Hunt, Archs., 51 Leavenworth St., Waterbury, Conn.

The Stanley Works Co., Myrtle St., manufacturers of iron butts, bolts and hinges, plans to erect three additions at an aggregate cost of $74,000. A brick factory on Myrtle St., 40x200 ft., wil lbe carried up two additional stories, making the structure five stories high. A 5-story brick building, 40x42 ft., will be erected. The most important addition is a 1-story steel frame structure, 134x182 ft. Its height will be 52 ft.

The H. WALES LINES CO., Meriden, Conn., has been awarded the contract to build a brick and steel addition, to be used for foundry for the Union Mfg. Co., after plans prepared by Frank Slater. It will be 130x90 ft.

STAMFORD, CONN.—The Rolled Plate Metal Co., Garden St., which has outgrown its leased quarters plans erection of a plant of its own, to be located on Ludlow St. The main structure will be a brick factory, 35x120 ft.

The Engineering Specialty Co., 143 Liberty St., New York, has begun the erection of a plant on South St., in Stamford. The main factory will be a brick structure, 40x100 ft.

WATERBURY, CONN.—Plans have been completed for the erection of two additional factories for the Manufacturers' Foundry Co., Railroad Hill, Waterbury. Each will be of concrete and steel and one-story high. Their dimensions will be 102x105 ft. and 75x150 ft., respectively.

BRIDGEPORT, CONN.—Plans have been drawn for the enlargement of the plant of the Electric Cable Co., Crescent St., Bridgeport. A 1-story brick factory, 50 × 190 ft., will be erected.

OLEAN, N. Y.—A plant costing about $200,000 will be built here by the Alcohol Refinery Co. John Troy, Olean, is Pres.

SKANEATELES FALLS, N. Y.—We are officially advised that the CONSOLIDATED ENGINEERING & CONSTRUCTION CO., Syracuse Savings Bank Bldg., has been awarded the general contract for erection of the brick and steel building, 180x64, for the Glenside Woolen Mills, at Skaneateles Falls, and will be in the market for prices on structural steel, brick, mill work, cement, painting, roofing and metal skylights.

ROME, N. Y.—We have been officially informed that the W. J. BURNS CO., Syracuse, has been awarded contract for erection of a factory for the Wire & Tele. Co. of America, at Rome.

PATERSON, N. J.—The contract to erect the new mill for MAIBRUNN, PETZ & CO., 98 Greene St., New York, operating in this city as the Maple Silk Mfg. Co. on Totowa Ave., is reported to have been awarded to P. S. VAN KIRK CO., Fulton St. and Erie R. R. Contracts for power, shafting, etc., it is stated, will be let later. D. J. Maibrunn is Supt. and Gen. Mgr., Paterson.

PITTSBURG, PA.—F. C. Fischer, Arch., has awarded the contract to MURPHY BROS. for a brick and stone addition to the bakery of the Ward-Mackey Co., Liberty Ave. and 32d St. Cost, $25,000.

PHILADELPHIA, PA.—The Newhall Engineering Co., 136 South Fourth St., has plans completed for 3-story addition to paper mill, at Manayunk, for Hamilton & Sons. Brick and concrete construction will be used with slag roof, open plumbing, electric light fixtures.

Plans are being prepared by WM. STEELE & SONS, 16th and Arch Sts., who also have the contract for construction of a factory at Hancock and Westmoreland Sts. for the Brown-Morse Hosiery Co. A 5-story building will be erected and special machinery and power plant installed.

JOHNSTOWN, PA.—Plans are being prepared, it is reported, by Otto C. Wolf, 1025 Arch St., Philadelphia, for a 4-story building of iron construction with brick and stone facing, to be erected at Johnstown for the Germania Brewing Co. The dimensions of the building will be about 50x150 ft. Reinforced concrete and terra-cotta will be used in the construction of the floors.

ALLENTOWN, PA.—RITT[illegible] & SMITH, city, are reported to have [illegible] awarded the contract for erection of [illegible] silk mill of Kaltenbach & Stevens, of [illegible]yn, in East Allentown. The structure [illegible] be 1-story, 94x353 ft., brick, concrete [illegible] iron. It is designed so as to be easily [illegible]rged to four times its size. The boiler [illegible] engine house, 40x48 ft., will be built of [illegible]ar material. The plans were prepared b[illegible] Kaltenbach & Griess, Bedford, Ohio.

READING, PA.—GEORG[illegible] H. MEIN-HOLTZ has secured the co[illegible] for a factory for the Reading Dye W[illegible] It will be two stories high, 240x35 [illegible] and special machinery will be installed.

BALTIMORE, MD.—MONM[illegible]ER & SORRELL, 308 Laurens St., ha[illegible] secured contract for a carriage and au[illegible]bile factory at Carey and Herkimer Sts. [illegible] Spoerer's Sons. The building will be [illegible] ft., three stories, and constructed of [illegible] and reinforced concrete.

McLaughlin Bros., contra[illegible] engineers, have prepared plans for a [illegible]y building to be erected for J. M. Raffel & [illegible] 217 West Camden St., at the corner of Greene and German Sts. The structure w[illegible] cost about $35,000 and will occupy a site [illegible]8x58 ft. It will be of mill construction, w[illegible] brick walls and will contain elevators a[illegible] other conveniences. It will be used a[illegible] paper box factory. McLAUGHLIN BRO[illegible] have contract to do the work. They have [illegible]en granted a permit to tear down three [illegible]ldings now standing on the lot.

WESTPORT (Baltimore post [illegible]ffice), MD.—The Carr-Lowrey Glass Co., Westport, manufacturer of glass bottles, will [illegible]rect several additional buildings for increasing the capacity of its plant.

RICHMOND, VA.—The Unio[illegible] Stove Co., Inc., it is reported, will erect new buildings, one to be of corrugated construction 35x150 ft.; other buildings not yet decided on. The company will manufacture fine heaters and combination cooking and heating stoves. President, J. Aubrey Saunders; secretary-treasurer, W. H. Hefner. Address company, Mutual Building.

The H. W. Rountree & Bro. Trunk & Bag Co. is preparing to erect 5-story brick structure, 60x100 ft., as an annex to plant and warerooms adjoining. Work probably will be completed about July 1.

ROANOKE, VA.—It is reported that the Norfolk & Western Ry. Co. is proceeding with various improvements previously decided, about $800,000 being appropriated. It is stated the plans include $400,000 for erection and equipment of shops at Roanoke, Va., and about $200,000 for new machinery and tools. Under construction: brick foundry 140x740 ft., steel roof, traveling cranes, etc., to cost when completed $365,000; brick planing mill, steel roof, 94x254 ft., to cost $40,000; warehouse, 139x544 ft., to cost $13,000. Construction has not begun on cab shop, 75x200 ft., extension to smith shop, extension to boiler and flue shops and wheel mounting shop with cranes and tracks, cost to be $79,500. Machinery and tools will cost $132,750. West Roanoke yard will have repair shops and tracks to cost $40,000. Williamson, W. Va., yards will have lighting plant to cost $9,500. Ecklan, W. Va., will have a roundhouse to cost $50,000. The company will be ready soon to purchase the machinery. N. D. Maher is Gen. Mgr.

ASHEVILLE, N. C.—The Carolina Ice & Cold Storage Co., of this city, will erect a 2-story ice and cold storage plant here to cost about $50,000.

MANCHESTER, N. C.—A company, in which are interested W. D. McNeill, Gen. Mgr. of the Raeford Power & Mfg. Co., Raeford, N. C.; S. H. McRae and W. E. Kindley, of Fayetteville, N. C., proposes building a 10,000-spindle cotton mill at Manchester, N. C. Some 129 acres of land and a water-power property have been purchased which will be developed for operating the new mill. The power is now furnishing about 500 HP. and will be further developed.

GAFFNEY, S. C.—The Irene Mill will build an addition to its plant. H. D. Wheat is the owner.

MACON, GA.—Work is to begin at once on the big shops, the Central of Georgia Ry. Co. is to build at Macon, at a cost of $1,400,000. The machinery to be installed is to be driven by electricity, and more than 1,000 men will be employed. W. H. Fetner is Master Mechanic, Macon.

QUITMAN, GA.—The Quitman Lumber Co. will establish plant for manufacturing rough and dressed pine lumber and cypress shingles. Buildings to be erected: 52x110 ft., two stories high; 28x150 ft., two stories high; 20x60 ft., one story high; 40x60 ft., one story high, all of wood. The company will also erect dry-kiln. O. M. Wade is Arch.

ENSLEY, ALA.—The directors of the Tennessee Coal & Iron Co. have decided to improve and enlarge their steel rail mill at Ensley, and to increase its capacity to about 600,000 tons a year. The plans adopted will require virtually rebuilding the present plant as well as its enlargement. The work is already under way, and it is believed that it will be practically completed by the end of the year.

CHATTANOOGA, TENN.—The American Brake Shoe & Foundry Co. will soon commence erection of another plant, the main building of which will cover about 45,000 sq. ft., being 150 ft. wide by 300 ft. long, and will cost when completed from $50,000 to $75,000.

Bids are asked until April 15, by the Casey-Hedges Mfg Co., for erection of proposed additional buildings, for which Bearden & Forman, 24 Houston St., have prepared plans. The buildings are to be constructed of brick, steel and concrete, 107x500, 75x233 and 60x73 ft., respectively; one story, probably 53 ft. high, for boiler-making department; smelting power in largest building to cover 60x40 ft., for cranes 55 ft. high. Buildings and equipments reported as to cost $150,000.

MEMPHIS, TENN.—The Evansville Veneer Co. will erect a sawmill and veneering plant at Memphis, at a cost, for construction and equipment, of $30,000. The structures to be

erected will be ironclad, 70x80 ft. and 70x100 ft. and the plant will have a capacity of about 25,000 ft. of lumber a day.

NEWPORT, KY.—THE FERRO-CONCRETE CONSTRUCTION CO., Cincinnati, has recently secured the contract for rebuilding the plant of the Old '76 Distilling Co., which was burned some time ago. It is to be four stories high, 33x108 ft., reinforced concrete construction throughout, including walls, columns, beams, floors, and roof, with brick curtain walls. In addition a fermenting building of similar construction will be erected adjoining.

LOCKLAND, OHIO.—Rapp, Zettle & Rapp, Archs., Johnston Bldg., Cincinnati, have let general contract to JAMES STEWART & CO., Fisher Bldg., Chicago, for a 3-story covering building for the Carey Mfg. Co., Lockland. Cost, $80,000.

COLUMBUS, OHIO.—Herbert A. Linthwaite, Arch., 101 South High St., is preparing plans for a factory building, 600x250 ft., for the Bennington Typewriter Co., Harrison Bldg. Reinforced concrete, prepared plaster, will be used. Cost, $125,000.

HUNTINGTON, IND.—The Cincinnati, Bluffton & Chicago R. R. Co. will erect shops this fall at Huntington, at a cost of about $60,000. D. C. Dunlap, of Bluffton, is Des. Engr. J. C. Curtis is Gen. Mgr. C., B. & C. R. R. Co

GOSHEN, IND.—H. F. Frizier, Arch., Nappanee, Ind., have let general contract to ISAAC W. MILLER, Goshen, for a 2-story brick factory building, 60x120 ft., for the Banta Furniture Co., Goshen, at $10,000.

ELKHART, IND.—Bids will be asked soon for the construction of the Menonite Printing Plant on the site of the plant recently destroyed by fire. The building will be 2-story, and the estimated cost is $65,000. J. F. and A. E. Funk are the proprietors.

NEWCASTLE, IND.—The contract for erection of the buildings for the Maxwell-Briscoe Automobile Co. has been awarded to PULSE & PORTER, of Greensburg, whose bid was $148,465. The work is to be completed by Aug. 1. The buildings will be principally of steel, brick and cement and will have a combined floor space of seven and one-half acres. The foundation for the main building is now under way and will be 720x330 ft. As soon as the foundations are completed electric arc lights will be strung and the work will progress both night and day.

EVANSVILLE, IND.—JOHN KOCH has been awarded a contract for construction of a 2-story addition to the Evansville Metal Bed Co.'s plant. Harris & Shopbell are Archs.

KOKOMO, IND.—Bids are asked by the National Mitten Works Co. for erection of a new brick factory building.

HARBOR BEACH, MICH.—E. C. Van Leyen and E. A. Schilling, Arch., 47 Peninsular Savings Bank Bldg., Detroit, are preparing plans for a 2-story manufacturing plant, to consist of four buildings, for the Huron Building Co., Harbor Beach. Construction will be of reinforced concrete with fireproofing, concrete roofing, electric light fixtures, water closets, washstands, etc. Cost, $40,000.

DETROIT, MICH.—The Pilling Air Engine Co. will build a new factory, to more than double its present capacity. J. C. Fleming is Pres. and Mgr.

SAULT STE. MARIE, MICH.—MARSHALL N. HUNT has been awarded the contract for the erection of a woolen mill at Ridge and Douglas Sts., which is to be three stories high, 110x125 ft. brick.

MENASHA, WIS.—The Walters Brewing Co., of Menasha, has decided to erect a $25,000 malthouse with a capacity of 250,000 bushels, of solid brick construction, with a battery of three double concrete drums to hold 1,000 bushels each. Building proper will be 50x75 ft.

MILWAUKEE, WIS.—The Milwaukee Steel Foundry Co. has purchased five acres of land at West Allis, east of the West Allis Malleable Iron Co., near the Chicago, Milwaukee & St. Paul R. R. tracks, and proposes to erect a $100,000 foundry building.

H. J. Rotier, 141 Wisconsin St., is making plans for a factory building, 90x80 ft., 1-story, of brick, to be erected at 13th St. and Meinecke Ave., for the Dunck Tank Works. The cost will be about $18,000.

ST. GENEVIEVE, MO.—Holman & Laird, St. Louis, are preparing plans for a lime plant for the Peerless Lime Co., St. Genevieve, which will cost about $30,000.

JOPLIN, MO.—Austin Allen & Co., 612 Joplin St., have prepared plans for a 4-story bag room, 50x120 ft., for the Picher Lead Co. The structure will have steel frame, brick, concrete flooring, gravel roof, skylights, etc. Cost, $15,000.

ST. CHARLES, MO.—The American Car & Foundry Co., 25 Broad St., New York, will erect a new steel foundry as an addition to its plant at St. Charles, Mo., to cost about $500,000. Steel has, to a large extent, replaced the use of wood in car manufacture and the company will furnish its own steel. A portion of land in the French lawn suburb of St. Charles has been acquired as a site for the new plant, and work on the buildings will commence at once.

ST. LOUIS, MO.—L. & A. Scharff Distilling Co., 201 South Fourth St., has had plans prepared for distillery, 40x144 ft., six stories, with granitoid basement, concrete boilerroom, pumping apparatus for rectifying department, steam heat, electric lighting, two high-speed electric elevators, three motors for elevators. The building will cost $75,000 and be ready for occupancy Sept. 1. The work is to be sub-contracted, and bids opened about April 13. John L. Wees, Commercial Bldg., is Arch.

Widmann, Walsh & Boisselier, Archs., Wainwright Bldg., City, have let general contract to the GEISEL CONSTRUCTION CO., 620 Chestnut St., for four cooling towers for the Anheuser & Busch Brewing Association, at $10,000.

The Chapline Realty & Construction Co., Wainwright Bldg., has let mason contract to the SAUERBRUNN CONSTRUCTION CO. for an addition to factory building for the St. Louis Brass Co., at $20,000.

CHILDRESS, TEX.—It has been announced that the Fort Worth & Denver City Ry. Co. has awarded contracts to the TEXAS BLDG. CO. for constructing a new shop building, 120x248 ft., at an estimated cost of $56,000 and a 125-ton transfer table that will cost about $10,000. In addition to this, $3,500 will be spent on improving the old shop, a new reservoir for the storage of water costing $38,000 and $40,000 worth of machinery will be installed. This work will be started at once. D. D. Robertson, Childress, is Master Mechanic.

SAN FRANCISCO, CAL.—The American Biscuit Co., 816 Battery St., has applied for a permit to erect a factory on the west side of Battery St., between Broadway and Vallejo St. It is to be a 5-story reinforced concrete structure, to cost $250,000.

SANTA BARBARA, CAL.—The Southern Pacific Co. has decided the construction of a big round-house in the lower part of this city. Machine shops will also be built. The company proposes to expend a very large sum of money here and it is understood that local labor will largely be used, as THOMAS HOGAN, of Santa Barbara, is reported to have the contract for the work.

MONTREAL, QUE.—The Lakefield Portland Cement Co. has decided to erect a branch factory in Montreal, and has let contract to the CANADIAN GENERAL ELECTRIC CO., 81 St. Peter St., Montreal, for the electrical equipment, comprising three 1,300-HP. transformers, two 2,000-HP. transformers, one 20-HP. motor, twelve 100-HP. motors, eleven 75-HP. motors, three 50-HP. motors, and three 10-HP. motors, all complete, with the necessary switchboard and speed controllers. J. W. Pilcher is Mgr. of the electric company.

HAMILTON, ONT.—The contract for constructing factory for the Hamilton Steel & Iron Co. has been awarded for construction to F. C. ROBERTSON & CO., of Pittsburg, Pa., for $300,000, and the addition to the open hearth furnace in connection, to ALEX LAUGHLIN, of Pittsburg, for $50,000.

## MISCELLANEOUS CONTRACTS.

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

WHARF.—Souris, P. E. I.—E. A. WALLBERG, Montreal, Que., has contract for railway wharf at Souris. It will be built of reinforced concrete.

STEEL GRANDSTAND.—San Antonio, Tex.—A steel frame grandstand, to cost $15,000, will be erected by the directors of the San Antonio Fair Association.

RIP-RAP.—Wilmington, N. C.—Bids are asked until noon, May 2, for about 20,000 tons of rip-rap stone. Maj. Joseph E. Kuhn, Engr. (Advertised, Engineering News.)

SAND.—New York, N. Y.—Bids are asked until noon, April 15, by the Department of Docks and Ferries for furnishing and delivering about 3,000 cu. yds. of sand. J. A. Bensel, Comr.

FIRE - DEPARTMENT EQUIPMENT.—Vicksburg, Miss.—Bids are asked until April 15 for building a combination hose wagon and chemical engine. P. M. Harding, Acting Mayor.

BREAKWATER.—Goderich, Ont—Bids are asked by Fred. Gelinas, Dept. Public Wks., Ottawa, Ont., until April 18, for the completion of the breakwater at Goderich, Huron County, Ont.

WHARFS, COAL SHED.—New Rochelle, N. Y.—Bids are asked until 11 a. m., April 13, for repairing passenger wharf, freight wharf and trestle and coal shed at Fort Slocum. W. T. Wilder, Const. Q.-M.

BORING FOR OIL.—Medicine Hat, Alta.—The Alberta Government has set aside money in order to give a bonus of $2.50 per foot to anyone boring for oil or gas to a depth over 500 ft. Address W. H. Cushing, Calgary, Alta.

CEMENT.—Montrose, Colo.—Specifications and bidding sheets for furnishing 30,000 bbls. of Portland cement to the U. S. Reclamation Service are on file at office of Engineering News, New York. Bids are asked until April 15, as advertised in Engineering News.

PONTOONS.—Cincinnati, Ohio.—Bids were received on March 20, by Lieut.-Col. Wm. T. Rossell, U. S. Engrs., for construction of ten pontoons, as follows: Howard Ship Yards Co., Jeffersonville, Ind., $17,335; New Jersey Foundry & Machine Co., New York, N. Y., $26,600.

SIGNAL AND TELEPHONE CABLE.—Washington, D. C.—Bids are asked by the District Commissioners until noon, April 13, for furnishing underground signal and telephone cable for the Electrical Department of the District of Columbia. (Advertised, Engineering News.)

STONE.—New York, N. Y.—Bids are asked until 3 p. m., April 11, by the Department of Parks, for furnishing all labor and materials for furnishing and putting in place in the bulkhead at the foot of Ocean Parkway 3,500 cu. yds. of boat stone. Moses Herrman, Pres.

FIRE ALARM TELEGRAPH SYSTEM.—New York, N. Y.—Bids are asked by the Department of Education until 11 a. m., April 8, for installing fire alarm telegraph system in the Truant School and several public schools, Borough of Brooklyn. C. B. J. Snyder, Supt. School Bldgs.

QUAY WALLS.—Charleston, S. C.—Bids were opened March 30, at the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for the construction of quay walls at the Charleston Navy-Yard, as follows: New York Continental Jewell Filtration Co., 35 Wall St., New York, $114,890.

BRICK KILNS.—Suffolk, Va.—Alfred B. Cramer Co., Inc., will build five brick drykilns 100 × 20 ft. each, being built by Emerson system. E. J. Bradley Emerson, Engr. Product, pine, 3,500 to 4,000 ft. per day. Cost of kilns, $10,000 to $12,000. Guy I. Buell is Pres. and Gen. Mgr.

DAM, EXCAVATION.—Brookville, Ind.—Bids are asked by the Town Trustees, until April 18, for the construction of a frame dam 650 ft. long across the White Water River; also contract to cut an open channel 2,000 ft. long at same time. Estimated cost is $9,000. Calvin Carter, Engr.

BULKHEAD.—New York, N. Y.—Only one bid was received and opened on March 21 by the Park Commissioners of New York City for repairs and alterations to bulkhead, foot of Ocean Parkway, Boro. Brooklyn, which was submitted by Robertson & Gerehart, 18th Ave. and 62d St., Brooklyn, at $17,545.

DREDGING.—Brooklyn, N. Y.—Bids are asked until 11 a. m., April 10, for furnishing all labor and material required for dredging Gowanus Canal. The engineer's estimate of the quantity of materials necessary to be dredged is as follows: 27,700 cu. yds., scow measurement. Bird S. Coler, Boro. Pres.

DREDGING.—Philadelphia, Pa.—Bids were opened March 30, at the Bureau of Yards and Docks, Navy Dept., Washington, for dredging the Delaware River front, League Island Navy-Yard, Pa., as follows: American Dredging Co., 510 Mariner and Merchant Bldg., Philadelphia, item 1, Area A, 31 cts. per cu. yd.; Area B, 30 cts.; Area C, 30 cts.; area D, 37 cts.; item 2, 40 cts.; item 3, 38 cts.

CAPSTANS.—Charleston, S. C.—Bids were opened March 30, at the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for furnishing seven electric capstans for the drydock at the Charleston Navy-Yard, as follows: Hyde Windlass Co., Bath, Me., item 2, $12,890; item 4, $10,873. American Ship Windlass Co., Providence, R. I., item 1, $19,450 and $21,400; item 2, $14,450; $16,400; 7½ months.

TELEPHONE EXTENSIONS.—Montreal, Que.—At the annual meeting of the Bell Telephone Co. authority was asked to issue an additional $3,700,000 of bonds, making the total bond issue up to $7,500,000, the total amount allowed until the stock issue reaches $10,000,000. As a great number of extensions are planned, the company will issue stock shortly to bring the stock issue up to $30,000,000. C. F. Size is Pres., Montreal, Que.

BATH HOUSE.—Chicago, Ill.—The Northern Trust Co., Byron L. Smith, Pres., La Salle and Monroe Sts., Chicago, and Frank J. Loesch, Attorney, 184 La Salle St., are trustees for a fund of $75,000 to be used for the purchase of a site and constructing a public bath house and swimming tank in Chicago as a memorial to the late Henry C. Durand. The trustees will make arrangements for its construction. When completed the building will be conveyed to the city of Chicago.

CAPSTANS.—Norfolk, Va.—Bids were opened March 30, at the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for furnishing nine electric capstans for the drydock at the Norfolk Navy Yard, Va., as follows: Hyde Windlass Co., Bath, Me., item 2, $16,400; item 4, $13,882; Atlantic Engineering & Construction Corporation, Norfolk, Va., item 3, $8,500. American Ship Windlass Co., Providence, R. I., item 1, $26,450 and $20,050; item 2, $20,950 and $18,550; item 3, $5,300 and $4,850.

TELEPHONE LINE.—Edmonton, Alta.—The Government, it is said, will operate a long-distance telephone system on a large scale, and will also supply all cities, towns, villages, municipalities and local-improvement districts that want telephones with systems at the lowest possible cost, the Province undertaking the installation, operation and maintenance of telephones all over the Province. "The Government would be able to furnish them for $10 or $12 a year, and supply long-distance connections for little more than the cost of a postage stamp."

SUBWAY.—Jacksonville, Fla.—J. W. Richardson, Engr.-in-Chief, Jacksonville Terminal Co., Dyal-Upchurch Bldg., advises us that bids are asked until 6 p. m., April 20, for building the Myrtle Ave. subway. The subway will consist of two driveways, sidewalks and space for electric cars and will be with approaches about 470 ft. long. Company expects in a few days to have plans and specifications ready and will ask for bids on freight house and office building for the Atlantic & East Coast Terminal Co. of this city. There will be two buildings, each approximately 51 × 775 ft. long.

DREDGING.—Grand Rapids, Mich.—The following are the bids opened on March 20 by Col. M. B. Adams, Corps Engrs., U. S. A., for dredging Saugatuck Harbor, 60,000 cu. yds.: (a) price per cu. yd., scow measure, (b) per cu. yd., spoil bank measure: Greiling Bros., Green Bay, Wis., (a) 15.8 cts.; (b) 15 cts. Burk, Smith & Nelson, Muskegon, Mich., (a) and (b) 17 cts.; Great Lakes Dredge & Dock Co., Chicago, Ill., (a) 24.5 cts.; Fitz Simons Connell Co., Chicago, Ill., (a) 27 cts.; Samuel O. Dixon, Milwaukee, Wis., (a) 28 cts.

Bids were opened same time and place for dredging harbors on East Shore, Lake Michigan: Greling Bros., Green Bay, Wis., 21½ cts. a cu. yd.; Great Lakes & Dredge & Dock Co., Chicago, Ill., 27½ cts.; Fitz Simons Connell Co., Chicago, Ill., 20 cts.

CANAL.—Boston, Mass.—One bid was received on March 28 by the Boston, Cape Cod & New York Canal Co., 43 Tremont St., Boston, Mass., for constructing a ship canal, beginning at the mouth of Monument River, on Buzzards Bay, and running through the towns of Barnstaple Bay, as advertised in Engineering News. William Barclay Parsons is Ch. Engr., 60 Wall St., New York, N. Y.; Charles C. Dodge is Pres. of Canal company. The CAPE COD CONSTRUCTION CO.'s bid of $11,960,000 was accepted. Company was organized under the laws of Maine, with a capital stock of $85,000 cash paid in. August Belmont is Pres., and John F. Buck, 23 Nassau St., New York, is Secy. and Treas. Arthur L. Devens and John B. McDonald are Vice-Presidents. Under the terms of the contract the construction company agrees to take in payment for building the canal $5,990,000 worth of stock of the canal company and $6,000,000 worth of its bonds. It offered a bond of $750,000 to guarantee the performance of all obligations under the contract.

SUBWAYS.—New York, N. Y.—Bids are asked by the Board of Rapid Transit R. R. Commissioners, 320 Broadway, until noon, April 25, for building the section of the subway railroad system to be known as the Lexington Ave. Route. Contracts will be let for any one or more of the eleven separate parts of this route, for which deposits are required as follows: For section 5-O-1, $125,000; 5-O-2, $125,000; 5-O-3, $125,000; 5-A, $25,000; 5-B, $150,000; 5-C-1, $100,000; 5-C-2, $50,000; 5-C-3, $5,000; 5-D-1, $150,000; 5-D-2, $150,000; 5-D-3, $150,000. If the contract covers two or more parts of the road the deposit shall be the aggregate of the deposits required in respect of each of the several parts contracted for. For all of Sections 5-O-1, 5-O-2, 5-O-3 and 5-A there will be four tracks. For Section 5-B there will be two tracks. For Section 5-C-1 and Section 5-C-2 there will be two tracks. In the loop above described as Section 5-C-3 there will be one track. For Section 5-D-3 there will be four tracks as far south as the point between 36th and 37th Sts.; there will be two tracks from the point of divergence through 36th St. and Fifth Ave. to the point where the lines reunite and two tracks from the point of divergence through Lexington Ave. and 35th St. to the point in Fifth Ave. where the lines reunite, and for the remainder of the distance southerly under Fifth Ave. and Broadway there will be four tracks. For Section 5-D-2 there will be four tracks. For Section 5-D-1 there will be four tracks to the Chambers St. station. South of the Chambers St. station southerly under Broadway, Vesey St., Trinity Pl. and Greenwich St. there will be two tracks. Additional tracks for terminal purposes are to be constructed under Battery Pl. and Battery Park. Suitable stations, as shown on the plans, together with crossovers, turnouts and sidings, as may be necessary, are to be provided. Section 5-A will not be contracted for at present if contract is let for 5-D-3. The tracks are to be of standard-gage. The tunnels are to have a height of not less than 13 ft. in the clear, and a maximum width of 15 ft. for each track, except at stations, curves, etc., where the width may be increased. The roof of the tunnels is generally to be as near the surface of streets as street conditions and grades will permit, but will be depressed whenever necessary to avoid grade crossings as well as where approaching the Harlem River. The roof and sides of the tunnels will be of iron or steel and masonry.

Bids are asked at the same date by the Board of Rapid Transit R. R. Commissioners for the Seventh and Eighth Ave. and Jerome Ave. subway routes. Deposits will be required as follows: For Section 4-D-1, $25,000; 4-D-2, $50,000; 4-C, $100,000; 4-B, $100,000; 4-O-1, $60,000; 4-O-2, $20,000; 4-O-3, $20,000; 4-A, $100,000; 4-AA-1, $200,000; 4-AA-2, $200,000; 15-A, $60,000; 15-AA-1, $100,000; 15-AB-1, $100,000; 4-H-1, $200,000; 4-H-2, $175,000. There will be four tracks from the terminal in Battery Park to about 150th St. There will be two tracks in the Macomb's Lane loop and two tracks from 150th St. and Eighth Ave. northerly under the Harlem River and Jerome Ave. There will be a single-track loop constituting a part of Section 4-D-2 which will begin under West Broadway at a point near Murray and Warren Sts. and then pass under private property, Greenwich St. and Barclay St. to a point near the corner of West Broadway and Barclay St. Bion L. Burrows, Secy.

## U. S. POSSESSIONS AND CUBA.

EXPLOSIVES.—Panama.—Requisitions have been received from the Isthmus by the Isthmian Canal Commission, Washington, D. C., calling for a large quantity of explosives, as follows: 867,000 lbs. saltpeter dynamite, 45% nitro-glycerine; 300,000 lbs. same, 60% nitro-glycerine; 60,000 detonators; 280,000 ft. triple tape fuse; 60,000 electric exploders. Specifications will be available in a few days under Circular 359.

STEEL.—Panama.—Bids were opened April 2, at the office of David W. Ross, Gen. Purchasing Officer, Isthmian Canal Com., Washington, D. C., for furnishing (a) a large quantity of steel angle bars, and (b) a large quantity of machine bolts, as follows: United States Steel Products Exports Co., 24 State St., New York, (a) $22,464, 120 days; H. A. Lanman, Columbus, Ohio, (b) $32,198, 150 days; Manning, Maxwell & Moore, 85 Liberty St., New York, $29,094, 180 days; Oliver Iron & Steel Co., Pittsburg, (b) $27,200, shipment, 120 days; Schaper Construction Materials Co., 136 Liberty St., New York, (b) $29,350, 105 days; Sherman, Brown, Clements Co., 78 Murray St., New York, (b) $26,800, 120 days; James W. Sederquist, 8 Oliver St., Boston, (b) $33,785, 180 days; Allegheny Forging Co., Pittsburg, Pa., (b) $30,425, 100 days; Upson Nut Co., 613 Euclid Ave., Cleveland, Ohio, (b) $31,418, 150 days.

LUMBER.—Panama.—Bids were opened March 26 at the office of David W. Ross, Gen. Purchasing Officer, Isthmian Canal Com. Washington, D. C., for furnishing 4,100,000 ft., B.M., lumber, common long-leaf yellow pine, Douglas fir, or California redwood. Bids were: A. S. Bacon & Sons, 2 Bay St., Savannah, Ga., $116,645, 150 days; Bellingham Bay Lumber Co., San Francisco, $113,507, 90 days; Bowring & Co., 17 State St., New York, $120,950, no time stated; Camp & Hinton, New Orleans, $110,615, 90 days; Continental Lumber Co., Houston, Tex., $133,100, 150 days; Carter Lumber Co., Houston, Tex., $136,800, 400 days; Dixon Lumber Co., Savannah, Ga., $117,350, no time stated; G. Elias & Bro., Buffalo, N. Y., $130,000, 150 days; Gamwell & Wheeler, Pioneer Bldg., Seattle, Wash., $146,450; Wm. D. Gill & Sons, 701 President St., Baltimore, Md., $122,547, 150 days;

J. K. Joice & Co., 164 Dearborn St., Chicago, $125,050, 120 days; Long Bell Lumber Co., Kansas City, Mo., $121,150, no time stated; Chicago Lumber & Coal Co., St. Louis, $113,524, 118 days; LUTCHER & MOORE LUMBER CO., Orange, Tex., $106,737.50, 60 days; ENSIGN LUMBER CO., Jacksonville, Fla., $103,500, 150 days. (Contract awarded to these companies, as the lowest bidders.)

PIPE.—Panama.—Bids were opened April 2, at the office of David W. Ross, Gen. Purchasing Officer Isthmian Canal Com., Washington, D. C., for furnishing (a) 180,000 ft. extra heavy black iron pipe; (b) fittings for same; (c) 1,900 brass gate valves and 1,400 iron body gate valves. Bids were as follows: Bridgman Bros. Co., 1426 Washington Ave., Philadelphia, (a) $53,750, (b) $14,451; Chapman Valve Mfg. Co., Indian Orchard, Mass., (b) part, $2,481, (c) $21,247; Crane Co., 624 W. Pratt St., Baltimore, (b) $6,437 and $9,610. (c) $10,510 and $14,387; Kennedy Valve Mfg. Co., 57 Beekman St., New York, (c) part, $2,945; Nelson Valve Co., Wyndmoor, Pa., (c) $16,150; H. A. Rogers Co., 19 John St., New York, (c) $15,911; United States Steel Products Export Co., 24 State St., New York, (a) $48,440, (b) $11,827, (c) $24,585; Queen City Supply Co., Cincinnati, Ohio, (c) $13,045; Central Metal & Supply Co., 609 East Lombard St., Baltimore, (b) $14,417, (c) $25,109; E. F. Keating Co., 463 Water St., New York, (a) $57,182, (b) $14,235, (c) $10,999; Motley, Green & Co., 66 Broad St., New York, (a) $55,315; Manhattan Supply Co., 127 Franklin St., New York, (b) $12,640, (c) $13,752; Sherman-Brown-Clements Co., 78 Mur-Mohler, 611 William St., Baltimore, (b) $15,ray St., New York, (c) $16,593; Cuyler & 251, (c) $26,960.

ROCK CRUSHER.—Panama.—Bids were opened April 2 at the office of the Isthmian Canal Commission, Washington, D. C., for furnishing a power plant for the rock crusher plant at Porto Bello, C. Z., under Circular 356, Class 1. Bids are on: (a) work complete; (b) air compressor; (c) generator and engine; (d) water-tube boilers. Bids were as follows: D'Olier Engineering Co., 119 South Eleventh St., Philadelphia, (a) $29,548 and $28,134, 105 days; Manning, Maxwell & Moore, 85 Liberty St., New York, (a) $29,983, 224 days; Motley, Green & Co., 66 Broad St., New York, (a) $27,725, 120 days; A. D. Granger Co., 95 Liberty St., New York, (a) $24,310, 180 days; Chicago Pneumatic Tool Co., 95 Liberty St., New York, (b) $3,937 and $4,087, 90 days; Mosher Water Tube Boiler Co., 1 Broadway, New York, (d) $21,414, 120 days; National Electric Supply Co., Washington, (c) $2,789, 60 days; General Electric Co., Schenectady, N. Y., (c) $3,480, 130 days; Westinghouse Electric Co., Commonwealth Trust Bldg., Baltimore, (c) $3,215; Ingersoll-Rand Co., 11 Broadway, New York, (b) $5,506, $5,604, 167 days; Laidlaw-Dunn-Gordon, 114 Liberty St., New York, (b) $4,925, 150 days; Blaisdell Machinery Co., Bradford, Pa., (b) $3,227, 90 days; Platt Iron Works, Dayton, Ohio, (b) $4,700, no time; A. L. Ide & Sons, 11 Broadway, New York, (c) engine alone, $2,562, 100 days; Western Electric Co., 463 West St., New York, (c) $3,925; E. Keeler Co., Williamsport, Pa., (d) $11,028, $11,143, $11,488, 140 days.

## MEXICO.

*The names of parties awarded contracts are printed in capital letters.*

TELEPHONE LINE.—Chihuahua.—ADOLFO BROMINAN has contract to erect a telephone line between Mineral de Adalgas and Jiminez, Chih., to be completed within six months.

MINING MACHINERY.—Tepic.—The San Jose de Ventanas mine, in the Jora District of Tepic, has been purchased by Harry M. McIntosh, of Chicago, and is to be equipped with reduction machinery.

WATER-WORKS.—Torreon. — LAUREANO LOPEZ has secured the contract with the State Government of Durango for the installation of water-works in Gomez Palacio and Lerdo. Lopez Negrete will superintend the work.

RESERVOIR.—Mexico City.—Bids will be received here for construction of two 10,000,000-gallon reservoirs and twelve miles of pipe line, according to plans by F. S. Badger, Engr.-in-Charge, at the office of the company, 91 Matamoras St. Monterey.

RAILROAD.—Aguascalientes.—We are officially advised that "the location survey of the Mexican International Ry. from Durango to Guadalajara has been completed to a point opposite Aguascalientes, and the engineers are now running a branch line into this city."

TELEPHONE LINES.—Sonora.—Work will soon be commenced on construction of a telephone line connecting Guaymas with Ortiz, Sonora. Stock is now being issued for the construction of another line between Guaymas and Nogales, which will be started within two months.

COTTON MILL.—Guadalajara.—The Campania Industrial De Guadalajara, a French concern, soon will begin the erection of a big cotton mill in this city at a cost of $3,000,000. The company already operates several mills in this vicinity and will combine them under one roof.

DAM.—Nazas River, Coah.—Much interest is being manifested in construction of a dam on the Nazas River, in the state of Coahuila, and it is reported that definite plans will be adopted in a short time for the construction. It is reported that the State Government of Coahuila is interested in building a dam to store water for irrigation in the Laguna district.

RAILWAY EXTENSION.—Chihuahua, Sonora.—It is reported that an organization has been made to extend the Rio Grande, Sierra Madre & Pacific Ry. across the Sierra Madre Mountains from the state of Chihuahua into the state of Sonora. The new company is formed by Col. W. C. Greene, principal owner of the existing road, and associates, and has the title of the Sierra Madre & Pacific Ry. Co. It is capitalized at $6,000,000, gold.

MINING MACHINERY.—El Oro, Mexico.—The La Prueba Mining Co. is preparing to purchase and install a large amount of machinery. The mine is located in the El Oro District, State of Mexico. Included in the machinery will be pumps of sufficient capacity to keep the mine unwatered. The president of the company is W. Mason Smock; Vice-Pres., William H. Rice; Secy., Lic. Ricardo F. Chism; Treas., Lawrence F. Bedford. The offices of the company are at San Juan de Letran, No. 1, City of Mexico.

ELECTRIC RAILWAY.—Torreon, Coah.—Chinese residents in Torreon, headed by Foon Chuck and Dr. J. W. Limm, have secured a concession to build an electric street car line from the cemetery to New Torreon, where they have large land holdings. It is understood the concession provides that it will hold good unless the old company will build the line. At the expiration of four months the Chinese can commence construction. It is reported the company has concluded not to build the extension, which would cost $200,000.

ELECTRIC LIGHT AND POWER PLANT.—Campeche, Cam.—L. B. Spyer & Co., bankers in the City of Mexico, have secured from the State Government of Campeche a concession to furnish electric light and power for the city of Campeche, the capital of the state. The capital of the company will be $300,000. The concession carries the exclusive right to furnish electric light and power for the city for a term of 20 years. About 2,000 lights, at $2 monthly a light, will be furnished, besides which the Government will take 60 arc lamps and 200 lamps of 50 c. p. at a yearly price of $8,500.

HDYRO-ELECTRIC PLANT.—Duero River, Mich.—With a view to meeting the demand for additional electric power in the Guanajuato mining district, and in other sections, the Guanajuato Power & Electric Co., of the city of Guanajuato, Gto., is taking up additional water rights along the Duero River, in the state of Michoacan, and a second hydro-electric plant will be installed. The company's present plant has a capacity of 6,000 HP. New transmission lines are proposed to San Felipe and the Pozos mining camp, both in the state of Guanajuato. H. H. Filley is Ch. Engr. of the company.

ELECTRIC LIGHT AND POWER PLANT.—Saltillo, Coah.—E. Hermann, a resident of Saltillo, Coah., is interested in establishment of a new power and light plant in this city. Another light and power plant, in which Alfred Liliandahl, of Saltillo, is interested and for which a concession has been granted by the Government, is also contemplated for the city, in which it is proposed to use the waters of the Choro de Agua near Arteaga, to furnish the power. New Jersey capitalists are largely interested in the latter project. Eventually it is the plan of the promoters of this scheme to construct an electric railway between Saltillo and Arteaga.

MINING MACHINERY.—Guanajuato, Gto.—Plans have been prepared for a 20-stamp mill for the Republic Mines Co. at Guanajuato. This will be the first unit of a plant of 80 tons daily capacity. A 100-stamp mill is contemplated for the La Luz and Refugio mine, by the Guanajuato Development Co. The construction work on the Bustos mill at the Cata mine of the Guanajuato Reduction & Mines Co.'s property, preparatory to the addition of 80 stamps to the mill, which will double the present milling capacity, is about completed, and the erection of the addition will commence at once. Upon the completion of these 80 stamps, 80 additional stamps will be added, making a total of 240 stamps.

## FOREIGN CONTRACTS.

PORTLAND CEMENT. — Roumania. — According to the "Curierul Financiar" the Mayoralty of Ploesci invites bids until April 30 for the supply of 1,600,000 kilogs. Portland cement.

STEAM CRANES, DUMP WAGONS.—Spain.—Bids are asked until April 13 by the Port Works Board, Castellon, for two steam cranes of 25 and ten tons capacity respectively and twelve dump wagons (1.30 meter gage) of a capacity of twelve tons. Local representation is necessary.

GALVANIZED IRON WATER PIPE.—South Africa.—The "Board of Trade Journal," London, states that bids are asked until 11 a. m., April 23, by the Tender Board, P. O. Box 4570, Johannesburg, for supplying the Central South African Railways with 90,000 ft. of galvanized iron water piping.

CANAL.—Austria-Hungary—Surveys have been carried out by the Hungarian government for the construction of a canal between the Danube and the Theiss, and it is probable that a bill for carrying out this work will shortly be submitted to Parliament. The cost of the work is estimated at 60,000,000 crowns ($12,180,000).

POWER DEVELOPMENT.—Sweden.—The waterfall of Dingersjo has been bought by the Holmia Electrical Co., of Stockholm. The fall is expected to supply power of 1,500 HP. to Sundsvall. The power station is said to need three turbines, besides electrical generators, each of 800 HP., at an estimated cost of about $125,000.

POWER CONCESSION. — Italy. — Water power concessions have been granted at Milan to the following firms: To the Peligna Electric Co., from the Vallone della Fonte and dell' Inferno, Aquila, for the production of electric power for lighting. Also to Garbaccio Joseph and Lanzone Ferdinand & Son, from the Strona de Cossato torrent, Novarro, for the production of electric power for the use of cloth factories at Pistolesa and Lower Mosso.

HARBOR AND RAILWAY CONTRUCTION.—Southern Nigeria.—It is proposed to spend about $750,000 on the construction of a mole 3,800 ft. long on the eastern side of the entrance to Lagos Harbor, about $250,000 on the lengthening and strengthening of the government customs wharf, about $250,000 for the purchase of a dredger (including delivery at Lagos) for work on the bar, and about $1,750,000 for extension of the railway to Ilorin.

RAILWAY.—Netherlands.—A steam railway, 34 kilometers long, from Winchoten to Terapel, at an estimated cost of 825,000 florins (about $330,000); this includes the cost of substituting steam for horse traction on the existing line between Winchoten and Wolde.

W. E. Cramer, The Hague, has been appointed the engineer to plan a system of tramways between the communes of Philippine, Hook, Neuzen, Zaamslag, Azel, Westdorp and Sas de Gand. Mr. Cramer is also engaged on the plans for tramway construction in Zeeland.

MUNICIPAL WORK.—Straits Settlements.—The cost of several projects proposed are announced to be as follows: Tanjong Pagar construction works—(1) main wharf, Lagoon dock and graving dock, $10,170,000; (2) Prai River dock, improvements to and reconstruction of wharves, $340,000;; Singapore Harbor works, $6,143,000; Singapore municipal water-works, $2,543,000; Penang pier extension and general harbor improvements and repayment of $340,000 borrowed from the Federated Malay States on account of Penang pier, $972,000; Penang municipal loan, improvement of water supply and other works, $826,000.

PORT WORKS.—Portugal.—The government has been authorized to take over the administration of the Port of Lisbon from May 8, 1907, and to form for this purpose a Council of Administration, which will be under the immediate control of the Ministry of Public Works, Commerce and Industry. The government is further authorized to spend 1,500,000 milreis (about $1,620,000) on modern appliances for working the port and on dredgers, tugs and improvement works; this sum will be raised by means of an internal loan. The law also provides for the levying of a small tax, varying according to tonnage, on all vessels entering the port, with the exception of vessels engaged in fishing or the minor coasting trade.

SANITARY AND WATER-WORKS.—Argentina.—The "Direcion General de Obras de Saluridad" has been authorized to spend 500,000 pesos (about $480,[illegible]), national currency, on the formulation [illegible] plans for sanitary works in Tucuman, C[illegible]entes, Avellaneda (Barracas al Sud), [illegible] Blanca and Mar del Plata, and for the [illegible]y of drinking water in Mercedes (Provin[illegible] of San Luis), Rio IV., Villa Maria, Villa [illegible]eva, Belville, Esperanza, Concordia, [illegible], Uruguay, Gualeguaychu, Gualeguay, [illegible]oria, Nogoya, La Paz, Diamante, Goya, [illegible]nteros, Villa Casilda, Curuzu-Cuatia, Vill[illegible]y, and Mercedes (Corrientes), Andalg[illegible] (Catamarca), Azul, Pergamino, Dolores, [illegible]n, Lomas de Zamora, General Lavalle a[illegible] Tandil.

TRAMWAY.—Italy.—The [illegible]cil of Public Works has approved the [illegible]truction of a tramway from Salerno to [illegible] di Pompei; and that the concession for [illegible] construction and working of a funicul[illegible] railway from Santa Margherita to Lan[illegible] d'Intelvi has been approved by Royal Dec[illegible]

The government, during [illegible] approved the application of electric tracti[illegible] the following lines, at the cost indi[illegible]: Milan to Monza and Lecco, $1,120,000; [illegible]mate to Bergamo, $280,000; Calolzo to [illegible]te S. Pietro, $100,000; Gallarate to Laven[illegible] $520,000; Domodossola to Iselle, $480,000; [illegible]aples to Salerno and Torre Annunziata [illegible]d branches, $1,000,000; the Genoa Circu[illegible]vallation Ry., $160,000; Pontedocimo to [illegible], $870,000; Pistoia to Poretta, $1,600,000; [illegible]vona to San Giuseppe, $600,000; Bardone[illegible] to Modane, $840,000.

RIVER IMPROVEMENTS.—Norway.—The Harbor Board of Skien and Porsgrund has prepared plans for deepening and widening the Skeenelf River in several places. The Skien Harbor Administration will propose to the Municipal Council a vote for 184,000 kroner for the deepening of the river at Graatan (near Skien), 55,500 kroner for the deepening of the channel at Tonsberg, 69,000 kroner for the cutting through of Molhangen (a great deposit of sand just above the bridge at Porsgrund, at the bend of the river), 31,000 kroner for the blasting of the sunken rock called "Risebaaen" (in the river just outside Molhangen), and 33,600 kroner for the blasting of the rock called "Stroem[illegible]angskjaeret" (between the bridge and Molhangen), a total in all of 373,100 kroner ($97,000) to be voted for the improvement of the river from Tonsberg to Skien.

AMMUNITION, RAILWAY ROLLING STOCK AND MATERIALS.—Roumania.—A bill has been introduced into the Roumanian Parliament by the Finance Minister for the opening of a credit of 23,700,000 lei ($4,700,000) on account of the Ministry of War, and of 50,000,000 lei ($10,000,000) on account of the Ministry of Works. The former sum will be expended on ammunition for the army and navy, increasing the number of ships, alterations in armaments, etc. The 50,000,000 lei destined for the Ministry of Works will be expended by the Railway Department; 13,400,000 lei being intended for rolling stock, 2,000,000 lei for track construction and improvement, 4,200,000 lei for bridge work, 8,700,000 lei for depots, machine shops, etc., 3,000,000 lei for doubling the Ploesti to Campina line, 3,000,000 lei for the Slobozia to Tzandarei line, 5,100,000 lei on other special railway and station extensions, 9,600,000 lei for port works at Constantza, etc.

## CONTRACT PRICES.

[Where (*) precedes items under Contract Prices the work was advertised in Engineering News.]

*TRUNK LINE SEWER.—Sayre, Pa.—On March 12 bids in detail were received as follows, for constructing trunk line sewer. N. F. Walker, Boro. Engr., at Athens, Pa. The bidders were :(AA) Boro. Engineer's Estimate; (BB) Busch & Stewart, 8 Susquehanna Trust Bldg., Williamsport, Pa.; (CC) John J. Higgins, Waverly, N. Y.; (DD) Bolton G. Coon, Kingston, Pa.; (EE) J. L. Shea & Co., Sayre, Pa.; (FF) H. B. Failing, 409 Broadway, Fulton, N. Y.; (GG) John J. Tyne & Co., 16 Walnut St., Binghamton, N. Y.; (HH) Moore & Smith, 177 Elk St., Buffalo, N. Y.; (JJ) Fritz & Partridge, Scranton, Pa.:

| | (AA) | (BB) | (CC) | (DD) | (EE) | (FF) | (GG) | (HH) | (JJ) |
|---|---|---|---|---|---|---|---|---|---|
| 4,240 ft. 24" vit. pipe sewer complete, av. depth 10.9' | $2.61 | $2.85 | $2.60 | $2.94 | $2.75 | $2.99 | $3.82 | $3.00 | $3.0[illegible] |
| 1,060 ft. 20" vit. pipe sewer complete, av. depth 15.1' | 3.35 | 2.55 | 3.13 | 3.22 | 2.70 | 3.25 | 2.98 | 4.00 | 3.54 |
| 560 ft. 18" vit. pipe sewer complete, av. depth 7.5' | 1.10 | 1.40 | 1.25 | 1.40 | 1.75 | 1.20 | 1.43 | 1.50 | 1.54 |
| 300 ft. 8" vit. pipe, catch-basin connections | .45 | .65 | .50 | .75 | .50 | .44 | .55 | 1.00 | .47 |
| 80 ft. (E) extra cost over regular pipe of 6", 8" and 10" Y's and T's, on 24" pipe | 2.75 | 4.12 | 2.75 | 2.20 | 3.00 | 8.70 | 2.50 | 5.50 | [illegible] |
| 40 ft. (E¹) extra cost over regular pipe of 6", 8" and 10" Y's and T's, on 20" pipe | 1.90 | 2.60 | 2.00 | 2.00 | 2.50 | 6.25 | 2.00 | 4.00 | [illegible] |
| 20 ft. (E²) extra cost over regular pipe of 6", 8" and 10" Y's and T's, on 18" pipe | 1.45 | 2.20 | 1.50 | 1.85 | 2.00 | 4.55 | 1.75 | 3.00 | [illegible] |
| Included in (E) (6" Y's and T's on 24" pipe) | .... | 4.00 | .... | 2.20 | .... | 8.70 | 2.50 | 5.50 | [illegible] |
| Included in (E¹) (6" Y's and T's on 20" pipe) | .... | 2.50 | .... | 2.00 | .... | 6.25 | 2.00 | 4.00 | [illegible] |
| Included in (E²) (6" Y's and T's on 18" pipe) | .... | 2.50 | .... | 1.85 | .... | 4.55 | 1.75 | 3.00 | [illegible] |
| 160 ft. cast-iron pipe under railroad, 24" av. depth | 10.00 | 12.50 | 9.00 | 9.00 | 8.00 | 8.50 | 8.75 | 12.00 | 12.00 |
| 100 ft. *2d line under railroad, 24" av. depth | .... | 8.50 | 6.00 | .... | .... | 6.90 | 8.75 | 12.00 | 6.00 |
| 24 ft. c.-i. pipe under sewer for waterway, 24" | 5.00 | 8.50 | 6.25 | 6.00 | 6.00 | 6.90 | 5.25 | 9.00 | 6.00 |
| 60 ft. c.-i. pipe and refrapping at outlet, 24" | 6.25 | 6.00 | 6.25 | 6.00 | 6.00 | 6.90 | 8.00 | 11.00 | 8.00 |
| 13 ft. manhole complete, not over 8' deep | 48.00 | 40.00 | 50.00 | 50.00 | 50.00 | 61.00 | 50.00 | 50.00 | 40.00 |
| 32 ft. extra cost per ft. manhole over 6' deep and 8" walls | 4.50 | 2.50 | 3.00 | 5.00 | 4.00 | 6.75 | 6.00 | 4.00 | 3.00 |
| 16 ft. extra cost per ft. manhole over 8' deep and 12" walls | 5.50 | 4.00 | 4.00 | 6.00 | 5.00 | 8.71 | 7.00 | 6.00 | 4.00 |
| 11 each, extra cost on manhole for the drop or intercepting connections | 6.00 | 10.00 | 7.00 | 8.00 | 10.00 | 90c. per foot | 6.00 | 20.00 | 20.00 |
| 10 each, inlets or catch-basins, complete | 30.00 | 55.00 | 40.00 | 75.00 | 30.00 | 61.00 | 40.00 | 70.00 | 55.00 |
| 2 each, lampholes, complete | 17.00 | 16.50 | 18.00 | 25.00 | 20.00 | 19.00 | 15.00 | 40.00 | 16.00 |
| 10 cu. yds. concrete, used in trench | 5.00 | 8.00 | 6.00 | 6.50 | 6.00 | 6.50 | 7.50 | 7.00 | 9.00 |
| 14 cu. yds. concrete, bulkhead at river | 6.00 | 12.00 | 7.00 | in bulk 85.00 | 7.00 | 8.00 | 7.50 | in bulk 100.00 | 9.00 |
| 500 ft., cost per foot, deep sewer connections within 7' of surface | .30 | .50 | .25 | .48 | .25 | .20 | .25 | .40 | [illegible] |
| 1 per M. lumber left in trench by order of engr. | 30.00 | 30.00 | 30.00 | 30.00 | 30.00 | 35.00 | 30.00 | 35.00 | 30.00 |
| 1 per M. lumber for foundations, construction included | 40.00 | 35.00 | 30.00 | 30.00 | 40.00 | 50.00 | 50.00 | 50.00 | 60.00 |
| 320 cu. yds. fill or embankment across the low ground | .50 | .60 | .50 | .60 | .60 | .40 | .60 | .90 | 1.2[illegible] |
| Total cost | $19,558 | $20,913 | $19,318 | $21,561 | $19,669 | $22,235 | $24,669 | $24,150 | $22,7[illegible] |

*This item is not included in total cost.

OUTLET SEWER.—New York, N. Y.—Bids were received as follows by Louis F. Haffen, Pres. Bronx Boro., on March 26, for constructing an outlet sewer and appurtenances in Borough of Bronx. The bidders were: (A) Jenks & Asserson, Brooklyn; (B) John C. Rodgers, 1929 Amsterdam Ave.; (C) McDonald & Barry, 767 Tremont Ave.; (D) F. V. Smith Contracting Co., 147 East 125th St.; (E) James Pilkington, Fort Washington Park, N. Y.

| | (A) | (B) | (C) | (D) | (E) |
|---|---|---|---|---|---|
| 225 lin. ft. of triple concrete sewer, two 10' × 8' and one 12' × 9' | $105.56 | $96.00 | $93.00 | $100.00 | $107.79 |
| 1,597 lin. ft. of triple concrete sewer, two 10' × 8' and one 11' × 9' | 101.16 | 90.00 | 89.00 | 82.00 | 100.76 |
| 533 lin. ft. of triple concrete sewer, two 10' × 8' and one 10' × 9' | 103.56 | 92.00 | 87.00 | 75.00 | 105.96 |
| 105 lin. ft. of triple concrete sewer, two 11' × 8' and one 9' 9'' × 9' | 105.06 | 105.00 | 98.00 | 100.00 | 112.05 |
| 188 lin. ft. of triple concrete sewer, two 10' × 8' and one 9' 9'' × 9' | 95.86 | 86.50 | 86.25 | 82.00 | 95.00 |
| 1,326 lin. ft. of triple concrete sewer, two 9' 9'' × 8' and one 9' 9'' × 9' | 97.06 | 88.00 | 86.00 | 68.00 | 96.54 |
| 256 lin. ft. of double concrete sewer, two 12' 6'' × 8' | 88.16 | 83.00 | 88.70 | 80.00 | 89.05 |
| 16 lin. ft. of double concrete sewer, two 9' 3'' × 8' | 64.06 | 55.00 | 81.45 | 80.00 | 58.68 |
| 513 lin. ft. of double concrete sewer, two 9' × 8' | 71.36 | 58.00 | 55.80 | 50.00 | 66.43 |
| 611 lin. ft. of single concrete sewer, 13' × 8' | 61.56 | 50.00 | 49.50 | 40.00 | 50.34 |
| 542 lin. ft. of single concrete sewer, 12' × 8' | 54.86 | 42.00 | 43.55 | 70.00 | 47.90 |
| 118 lin. ft. of single concrete sewer, 9' 3'' × 8' | 49.26 | 38.00 | 34.90 | 40.00 | 40.00 |
| 5 lin. ft. of single concrete sewer, 3' 6'' diameter | 10.00 | 15.00 | 10.00 | 10.00 | 9.00 |
| 5 lin. ft. of single concrete sewer, 3' diameter | 10.00 | 12.00 | 10.00 | 10.00 | 7.00 |
| 3 lin. ft. of pipe sewer, 30-in. | 5.00 | 8.00 | 5.00 | 7.00 | 4.00 |
| 9 lin. ft. of pipe sewer, 24-in. | 4.65 | 6.00 | 4.50 | 5.00 | 3.00 |
| 3 lin. ft. of pipe sewer, 20-in. | 4.00 | 5.00 | 4.25 | 4.30 | 3.00 |
| 15 lin. ft. of pipe sewer, 18-in. | 3.25 | 4.00 | 4.00 | 5.00 | 3.00 |
| 18 lin. ft. of pipe sewer, 15-in. | 2.80 | 3.50 | 3.50 | 4.00 | 3.00 |
| 80 lin. ft. of pipe sewer, 12-in. | 2.30 | 3.00 | 3.00 | 3.00 | 2.00 |
| 120 lin. ft. of concrete drain, 3' 9'' × 6' | 20.00 | 25.00 | 11.35 | 25.00 | 18.92 |
| 150 lin. ft. of concrete drain, 3' 6'' × 6' | 18.70 | 20.00 | 10.00 | 20.00 | 17.69 |
| 80 lin. ft. of 20-in. drain pipe, including all imbedding and surrounding Class "C" concrete, including also wing walls | 3.00 | 25.00 | 4.25 | 5.00 | 6.00 |
| 45 lin. ft. of 18-in. drain pipe, including all imbedding and surrounding Class "C" concrete, including also wing walls | 2.25 | 7.00 | 4.00 | 4.50 | 6.00 |
| 640 spurs for house connections | .31 | 1.00 | .75 | 2.00 | 1.00 |
| 4 receiving basins, complete | 180.00 | 175.00 | 200.00 | 200.00 | 200.00 |
| 500 cu. yds. of rock, to be excavated and removed | 3.00 | .01 | 1.00 | 5.00 | 2.00 |
| 100 cu. yds. of Class "A" concrete, in place, additional to that shown on the plan | 11.00 | 15.00 | 10.00 | 10.00 | 10.00 |
| 9,150 cu. yds. of Class "B" concrete, in place | 8.00 | 10.00 | 10.00 | 6.00 | 8.00 |
| 500 cu. yds. of broken stone for foundations, in place | 1.90 | 3.00 | 2.50 | 3.50 | 2.00 |
| 416,000 lbs. of steel bars, ⅝-in. and ¾-in., furnished and in place, in foundations | .05½ | .03 | .04 | .03 | .03 |
| 1,000 lbs. of steel bars, ¼-in. to 1¼-in., furnished and in place, additional to those shown on the plan, exclusive of steel bars, in foundations | .06 | .05 | .05 | .35 | .05 |
| 725,000 ft. B. M. timber for foundations, furnished and laid, and sheeting, furnished and left in place | 46.30 | 45.00 | 42.00 | 55.00 | 30.00 |
| 365,200 lin. ft. of piles | .35 | .40 | .25 | .30 | .25 |
| 30 cu. yds. of brickwork, in place | 15.00 | 15.00 | 20.00 | 15.00 | 12.00 |
| | $798,813 | $764,232 | $699,055 | $656,137 | $728,254 |

LOCK AND DAM, ETC.—Cincinnati, Ohio.—Bids were received March 22 by Maj. J. G. Warren, U. S. Engrs., for constructing Lock and Dam No. 11, two dwellings, two outhouses, two cisterns and one office building, near Ellis, Ohio. The bidders and itemized prices were as follows: (A) H. E. Talbott & Co., Dayton, Ohio; (B) Pennsylvania Contracting Co., Pittsburg, Pa.; (C) Edward J. Landor, Canton, Ohio; (D) The Hollerbach & May Contract Co., Evansville, Ind.:

| | (A) | (B) | (C) | (D) |
|---|---|---|---|---|
| **1. LOCK, DAM AND ACCESSORIES, COMPLETE, ON PLAN OF DAM NO. 1.** | | | | |
| 18,200 cu. yds. earth excavation | $0.50 | $0.70 | $0.60 | $0.75 |
| 450 cu. yds. rock excavation | 2.50 | 4.00 | 2.00 | 1.00 |
| 7,700 cu. yds. embankment | .50 | .70 | .50 | .40 |
| 11,900 cu. yds. concrete | 12.90 | 8.75 | 7.00 | 6.50 |
| 178,000 lbs. iron and steel | .10 | .10 | .075 | .07 |
| 400 cu. yds. riprap, placed | 2.50 | 3.50 | 1.00 | 1.00 |
| 500 cu. yds. riprap, furnished and placed | 2.50 | 4.50 | 1.50 | 4.00 |
| 67,000 ft. B. M. timber | 103.00 | 110.00 | 40.00 | 100.00 |
| 33,800 lin. ft. piling | .50 | .45 | .35 | .50 |
| 2 dwellings | 2,500.00 | 4,000.00 | 3,250.00 | 2,900.00 |
| 2 outbuildings | 325.00 | 500.00 | 250.00 | 175.00 |
| 1 office building | 300.00 | 500.00 | 400.00 | 300.00 |
| 2 cisterns | 200.00 | 250.00 | 130.00 | 125.00 |
| Total | $217,786 | $178,085 | $135,640 | $139,690 |
| **2. LOCK, DAM AND ACCESSORIES, COMPLETE, ON PLAN OF DAM NO. 2.** | | | | |
| 17,600 cu. yds. earth excavation | $0.50 | $0.70 | .... | $0.75 |
| 450 cu. yds. rock excavation | 2.50 | 4.00 | .... | 1.50 |
| 7,700 cu. yds. embankment | .50 | .70 | .... | .40 |
| 10,690 cu. yds. concrete | 13.75 | 8.75 | .... | 6.55 |
| 181,000 lbs. iron and steel | .10 | .105 | .... | .07 |
| 400 cu. yds. riprap, placed | 2.50 | 3.50 | .... | 1.00 |
| 1,100 cu. yds. riprap, furnished and placed | 2.50 | 4.50 | .... | 4.00 |
| 127,000 ft. B. M. timber | 103.00 | 110.00 | .... | 100.00 |
| 31,800 lin. ft. piling | .50 | .50 | .... | .50 |
| 2 dwellings | 2,500.00 | 4,000.00 | .... | 2,900.00 |
| 2 outbuildings | 325.00 | 500.00 | .... | 175.00 |
| 1 office building | 300.00 | 500.00 | .... | 300.00 |
| 2 cisterns | 200.00 | 250.00 | .... | 125.00 |
| Total | $217,943 | $178,272 | .... | $139,744 |
| **3. LOCK, DAM AND ACCESSORIES, COMPLETE, ON PLAN OF DAM NO. 3.** | | | | |
| 17,400 cu. yds. earth excavation | $0.50 | $0.70 | .... | $0.75 |
| 450 cu. yds. rock excavation | 2.50 | 4.00 | .... | 1.50 |
| 7,700 cu. yds. embankment | .50 | .70 | .... | .40 |
| 11,340 cu. yds. concrete | 13.30 | 9.00 | .... | 6.80 |
| 178,000 lbs. iron and steel | .10 | .11 | .... | .07 |
| 400 cu. yds. riprap, placed | 2.50 | 3.50 | .... | 1.00 |
| 600 cu. yds. riprap, furnished and placed | 2.50 | 4.50 | .... | 4.00 |
| 67,000 ft. B. M. timber | 103.00 | 110.00 | .... | 1.00 |
| 33,800 lin. ft. piling | .50 | .60 | .... | .50 |
| 2 dwellings | 2,500.00 | 4,000.00 | .... | 2,000.00 |
| 2 outbuildings | 325.00 | 500.00 | .... | 175.00 |
| 1 office building | 300.00 | 500.00 | .... | 300.00 |
| 2 cisterns | 200.00 | 250.00 | .... | 125.00 |
| Total | $214,948 | $182,760 | .... | $139,477 |
| **4. LOCK.** | | | | |
| 17,000 cu. yds. earth excavation | $0.50 | $0.65 | .... | $0.75 |
| 7,400 cu. yds. embankment | .50 | .70 | .... | .40 |
| 9,100 cu. yds. concrete | 13.80 | 8.32 | .... | 6.60 |
| 124,000 lbs. iron and steel | .10 | .10 | .... | .07 |
| 400 cu yds. riprap, furnished and placed | 2.50 | 4.50 | .... | 4.00 |
| 60,000 ft. B. M. timber | 103.00 | 110.00 | .... | 100.00 |
| 26,800 lin. ft. piling | .50 | .45 | .... | .50 |
| Total | $169,730 | $123,702 | .... | $104,450 |

## ENGINEERING MATERIAL PRICES.

**TRACK FASTENINGS—**

Pittsburg, f. o. b. cars—Angle bars, 1.65 to 1.75 cts.; spikes, 2.40 to 2.50 cts.; bolts, square nuts, 2.65 to 2.75 cts.; bolts, hexagonal nuts, 2.80 to 2.90 cts.

**RAILS, STEEL—**

New York—at mill—New standard sections, $28; standard, second quality, $27; light sections 12 to 25 lbs., $31 to $33; old iron f. o. b. New York, $24.50 to $25; old steel, long lengths, $19.50 to $20; old steel, short pieces, $16.25 to $16.75.

Pittsburg—Standard sections, at mill, $28; standard, second quality, $27.50 to $28; light rails, 20 to 45 lbs., $32; 16-lb., $33; and 12-lb., $34 at mill.

**STRUCTURAL MATERIALS—**

New York—at tidewater—Beams and channels, up to 15-in., 1.84½ cts.; over 15-in., 1.84½ cts.; angles, 3 × 2 and up to 6 × 6, 1.84½ cts.; zees, 3-in. and larger, 1.89½ cts.; tees, 3-in. and larger, 1.89½ cts.; steel bars, half extras, 1.74½ cts.

**PLATES AND SHEETS—**

New York—at tidewater—Sheared plates tank, 1.84½ to 1.94½ cts.; flange, 1.94½ to 2.14½ cts.; marine, 2.24½ to 2.44½ cts.; still bottoms, 2.14½ to 2.29½ cts.; fire-box, 2.75 to 3.50 cts.

Pittsburg—Tank, ¼-in. thick and heavier, 1.70 to 1.80 cts.; black sheets, 27-gage, 2.50 to 2.55 cts.; black sheets, 28-gage, 2.60 to 2.65 cts.

**IRON—**

Pig Iron:

At New York—tidewater—

| | |
|---|---|
| No. 1 X Foundry, Northern | $23.20 to $24.70 |
| No. 2 X Foundry, Northern | 22.70 to 24.20 |
| No. 2 Plain Foundry | 22.20 to 23.70 |
| Gray Forge, Northern | 21.50 to 22.00 |
| Basic, Northern | 22.00 to 23.00 |
| No. 1 Virginia, Foundry | 24.15 to 25.35 |
| No. 2 Virginia, Foundry | 23.65 to 24.85 |
| No. 1 Foundry, Southern | 23.00 to 24.50 |
| No. 2 Foundry, Southern | 22.75 to 24.00 |
| No. 3 Foundry, Southern | 22.00 to 23.50 |
| No. 4 Foundry, Southern | 21.25 to 23.00 |
| No. 1 Soft, Southern | 22.75 to 24.50 |
| No. 2 Soft, Southern | 22.50 to 24.00 |
| Gray Forge | 20.00 to 22.00 |
| Mottled | 20.00 to 21.00 |

At Chicago—

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|---|---|
| Lake Superior Charcoal | $26.50 to $27.00 |
| Northern Coke Foundry, No. 1 | 26.50 to 27.00 |
| Northern Coke Foundry, No. 2 | 26.00 to 26.50 |
| Northern Coke Foundry, No. 3 | 25.50 to 26.00 |
| Northern Scotch, No. 1 | 26.00 to 27.00 |
| Ohio Strong Softeners, No. 1 | 26.00 to 26.50 |
| Ohio Strong Softeners, No. 2 | 25.50 to 26.00 |
| Southern Coke, No. 1 | 26.35 to 27.10 |
| Southern Coke, No. 2 | 25.85 to 26.35 |
| Southern Coke, No. 3 | 25.35 to 25.85 |
| Southern Coke, No. 4 | 24.85 to 25.35 |
| Southern Coke, No. 1 Soft | 26.35 to 26.85 |
| Southern Coke, No. 2 Soft | 25.85 to 26.35 |
| Southern Gray Forge | 21.85 to 22.35 |
| Southern Mottled | 21.85 to 22.35 |
| Southern Mottled | 21.85 to 22.35 |
| Malleable Bessemer | 26.50 to 27.00 |
| Standard Bessemer | 25.30 to 25.80 |
| Jackson Co. and Kentucky Silvery, 6% | 30.30 to 30.80 |
| Jackson Co. and Kentucky Silvery, 8% | 32.30 to 32.80 |
| Jackson Co. and Kentucky Silvery, 10% | 34.30 to 34.80 |

At Pittsburgh, f. o. b. cars—

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|---|---|
| No. 2 Foundry | $24.50 to $25.00 |
| Gray Forge | 20.85 |
| Bessemer Iron | 21.55 to 23.35 |
| Ferro-manganese | 75.00 |
| Muck Bars | 34.00 to 37.00 |
| Iron Bars | 1.80 to 1.85 |
| Cut Nails | 2.05 |

Cast-iron Pipe:

New York—Carload lots, net tons, 6-in., at tidewater, $34.50 to $35.

Chicago—4-in. water pipe, $37 to $38; 6-in. to 12-in., $36 to $37; over 12-in., $35 to $36, with $1 extra for gas pipe.

**MISCELLANEOUS MATERIALS—**

Asphaltum:

Ventura and other California asphalts, $20 to $23 per ton at New York; Trinidad refined, $22 to $25 per ton; Venezuela asphalt, $25 to $60 per ton; Bermuda asphalt, $25 to $35.

Cement:

Rosendale or Natural, in wood, 95 cts. per bbl.; Portland domestic, in sacks, $1.20 to $1.30; in wood, $1.50 to $1.60; German Portland, $1.90 to $2.10.

Copper:

Lake, 24.75 to 25 cts.; electrolytic, 24.25 to 24.75 cts.; casting, 23.50 to 24 cts.

Lead:

New York, spot, 6.15 to 6.25 cts.

Spelter:

New York, spot, 6.80 to 6.90 cts.

Tin:

New York, 40.40 to 40.75 cts.

Tar:

New York, $5.85 to $6 per bbl.

Pitch:

New York, $3.20 per bbl.

**LUMBER—**

New York, wholesale prices:

Piling—Spruce, ordinary cargoes, 6 to 7 cts.; oak, 14-in. butt, 40 to 50 ft., 19 cts.; 50 to 55 ft., 22 cts.; 55 to 60 ft., 23 cts.; 60 ft. and up, 25 cts.; pine, 60 to 65 ft., $8.50; 65 to 70 ft., $0.50; 70 to 75 ft., $10.50; 80 ft. and up, $16.

Railroad ties—Yellow pine, 6 × 9 ins. × 8 ft., 67 to 69 cts.; 6 × 8 ins. × 8 ft., 62 to 64 cts.; 7 × 9 ins. × 8 ft., 75 to 77 cts.; 7 × 8 ins. × 8½ ft., 74 to 75 cts.; 7 × 9 ins. × 8½ ft., 79 to 80 cts.

## CIVIL SERVICE EXAMINATIONS.

MECHANICAL DRAFTSMAN.—New York, N. Y.—An examination will be held on April 23 by the Municipal Civil Service Commission, 299 Broadway, New York, for the position of Mechanical Draftsman. Applications will be received until 4 p. m., April 11. Frank A. Spencer is Secy.

FOREMEN, ENGINEER.—Albany, N. Y.—The State Civil Service Commission will hold examinations April 20 for the positions of Foreman of Public Works, salary, $3 to $4 a day; Foreman Carpenter, Department Public Works, $3 to $4 a day, and Assistant Engineer, $50 to $75 a month. Charles S. Fowler is Ch. Examiner.

GEOLOGIST.—Philippines.—The U. S. Civil Service Commission announces the postponement to April 24 of the examination scheduled for March 6, to secure eligibles from which to make certification to fill a vacancy in the position of Geologist in the Philippine Service, at $1,800 a year, and similar vacancies as they may occur in that service. Age limit, 18 to 40 years. Application forms, 2 and 375.

TESTING ASSISTANT.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on April 24 to secure eligibles from which to make certification to fill one or two vacancies in the position of Testing Assistant in the Forest Service, Department of Agriculture, at $800 a year each, and similar vacancies as they may occur in that service. Age limit, 18 years. Application form, 1312.

ENGINEER.—Fort H. G. Wright (New London, Conn., post-office), N. Y.—The U. S. Civil Service Commission announces an examination on April 10 to secure eligibles from which to make certification to fill a vacancy in the position of Engineman, at $900 a year, in the Quartermaster's Department at Large, Fort H. G. Wright, N. Y., and vacancies as they may occur in any branch of the service requiring similar qualifications. Age limit, 20 years. Application form, 1093.

ASSISTANT ENGINEER (DESIGNER).—New York, N. Y.—An examination will be held by the Municipal Civil Service Commission, 299 Broadway, on June 4, for the position of Assistant Engineer (Designer). Candidates must have had at least five years' experience, part of which should have been in water-work designing and construction. Graduation from a technical school of recognized standing will be accepted as the equivalent of two years' experience. The examination is open to all citizens of the United States, and the rule requiring that two of the vouchers for candidates residing outside of the City of New York must be residents of the City of New York is waived for this examination. The minimum salary is $1,800 a year. Age limit, 25 years. Application forms will be received until 4 p. m. May 2. Frank A. Spencer is Secy. (Advertised, Engineering News.)

APPRENTICE DRAFTSMAN.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on April 24 to secure eligibles from which to make certification to fill vacancies as they may occur in the Ordnance Bureau, War Department, in the position of Apprentice Draftsman. It is understood that at this time there is one vacancy. Entrance salary, $30 a month, and promotions are made up to $60 a month, in the discretion of the Ordnance Bureau. No educational test is required. Applicants must indicate in their applications that they have an education equal to that of a high school graduate, and are familiar with ordinary drafting instruments and able to use them satisfactorily. An apprentice may enter the competitive examination for the position of draftsman (entrance salary, $1,200) whenever, in the opinion of his superior officers, his training and experience are sufficient. Age limit, 18 to 21 years. Application form, 1312.

ASSISTANT GEOLOGIST.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on April 24-25 to secure eligibles from which to make certification to fill vacancies in the positions of Assistant Geologist and Geologic Aid in the Geological Survey, at salaries ranging from $1,000 to $1,600 a year, as they may occur. The Department estimates that ten appointments will be made at an early date as a result of this examination, the salary depending upon the qualifications and experience of the eligibles secured. In certain cases where only a portion of the time of the appointee can be given to the work of the Department, the compensation will be upon a per diem basis for the service rendered. Appointments to the position of temporary field assistant will also be made from the resulting eligible list as far as possible. The compensation of such positions ranges from $60 to $100 a month, and the length of employment from three to seven months. Age limit, 20 years. Application form, 1312.

SCIENTIFIC ASSISTANT.—Washington D. C.—An examination is announced by the U. S. Civil Service Commission on April 17-18, to secure eligibles from which to make certification to fill vacancies as they may occur in the position of Scientific Assistant in the Department of Agriculture, at salaries ranging from $900 to $2,000 a year, depending upon the experience and qualifications of appointees. As a result of this examination certification will be made to fill a vacancy in the position of scientific assistant qualified in seed testing, in the Bureau of Plant Industry, at $900 a year. Special attention is invited to the fact that an examination will be given for "Assistant in Farm Management" as major optional subject No. 33, and that an examination will be given in "Systematic Agrostology" as major optional subject No. 34. The following-named major optionals will not be given during this series: (13) Game protection, (14) Geographic distribution of animals and plants, (30) Systematic and economic mammalogy, and (31) Systematic and economic ornithology. Age limit, 20 years. Application form, 1312.

## INDUSTRIAL NOTES.

THE ALBERGER PUMP CO. has lately been organized, with offices at 95 Liberty St., New York City. Mr. Louis R. Alberger is President; Mr. George Q. Palmer, Vice-President; Mr. B. W. Pierson, Secretary and Treasurer, and Mr. Frederick Ray, Chief Engineer. The company will manufacture centrifugal and turbine pumping machinery for all classes of work.

THE WESTERN MARYLAND RAILROAD has recently built new shops at Hagerstown, Md., to be used for the general repair of locomotives and equipment used on the division. These new shops, which will employ approximately 100 men, have a floor space of 70 × 300 ft. The electrical equipment, which will furnish power for the shop drive, will also be used to light the Company's terminal properties and operate the transfer table at the round house. This equipment comprises a 150-KW. and a 250-KW. Allis-Chalmers direct current generator, with exciter units of 10 and 15-KW capacity, respectively, and a small motor generator set. These machines are of standard Allis-Chalmers design, and are being built at the Electrical Works of Allis-Chalmers Company, Cincinnati, Ohio.

ALLIS-CHALMERS COMPANY, Milwaukee, has secured contract for supplying all of the air brake equipments required for all electric railways operated or controlled by the New York, New Haven & Hartford Railroad Co. This is without question one of the most important air brake contracts ever placed, and covers the air brake equipments required by electric railways in 29 cities. The railways included operate over a greater number of miles of trackage than any other system of electric railways in the world. The number of cars in service at the present time aggregates a total of about four thousand. Approximately fourteen hundred of the heavier cars are already equipped with air brakes of various types—over a thousand being of the Christensen type, now manufactured by Allis-Chalmers Company.

THE UNION SWITCH & SIGNAL CO. is now making a number of improvements to its plant at Swissvale, which, when completed, will practically double the productive capacity of these works. The board of directors recently purchased 34 acres of land adjoining their plant for the purpose of adding to the shops. The company has decided to grade ten acres of this plat at once.

Plans are now being drawn for a new building to contain a foundry, a blacksmith shop, and a power-house, and when these structures are completed the company will have 140,000 additional square feet of floor space for manufacturing purposes.

The business of the company increased last year 70% over that of the preceding year, and from present indications the company will do a business this year approximating $10,000,000.

THE ATLAS ENGINE WORKS of Indianapolis, Ind., has just been awarded the contract to furnish water-tube boilers for the new central power station to be erected by the Government at Washington, which, when completed, will furnish heat, light and power for the Capitol, the Congressional Library, and the new Senate and House office buildings.

J. G. White & Co. are the consulting engineers on the work, in addition to whom the Government has its own board of experts. The equipment will include 16 600-HP. Atlas high-pressure water-tube boilers, equipped with Roney stokers, and 4 2,000-KW. Westinghouse-Parson's turbines and generators. Power and light will be distributed through four sub-stations, one being located in each of the buildings supplied. The order calls for deliveries beginning August 1, and the completed plant, it is hoped, will be ready for operation by the first of the year. The order for boilers is the largest ever placed by the Government.

## TRADE PUBLICATIONS.

STEEL SPRINGS.—Railway Steel-Spring Co., 71 Broadway, New York City. Paper; 6 × 9 ins.; pp. 34; illustrated.

Many different styles of locomotive and car springs are illustrated, there being very little text.

STEAM TRAP.—Richard J. Flinn, West Roxbury, Mass. Paper; 3¼ × 5¾ ins.; illustrated.

The Flinn differential steam trap is described in the pamphlet. It is designed for any steam pressure or back pressure and requires no adjustment.

FIRE PUMPS.—C. H. Wheeler Mfg. Co., Lehigh Ave. and 18th St., Philadelphia, Pa. Paper; 5¾ × 7¼ ins.; illustrated.

Underwriter fire pumps are described in this circular. They are made in sizes of 500 to 1,500 gal. capacities per min. A table gives principal dimensions.

ROCK DRILLS.—Ingersoll-Rand Co., 11 Broadway, New York City. Catalogue No. 46. Paper; 6 × 9 ins.; pp. 84; illustrated.

Rand drills are fully described and information regarding sizes, capacities and prices given. List of repair parts are also given.

CARD INDEX.—The Library Bureau, Chicago. Paper; 5 × 8 ins.; pp. 14; illustrated.

This pamphlet is devoted to tab cards and their uses, with illustrations showing their adaptation to various purposes in card index records.

CONCRETE ROOFING TILE.—American Cement Tile Mfg. Co., Wampum, Pa. Paper; 9 × 6½ ins.; pp. 24; illustrated.

These tiles are very large, 26 × 52 ins., requiring very little steel framework for their support. They are being used for steel mills, factories and other industrial buildings.

STEAM TURBINES.—Wilkinson Steam Turbine Co., Main Office Corliss Steam Engine Works, Providence, R. I. Paper; 4 × 9¼ ins.; pp. 12; illustrated.

The Wilkinson steam turbine is described. The steam supply is controlled by an automatic cut-off valve operated by an eccentric varied by the governor.

ALTERNATORS.—Allis-Chalmers Co., Milwaukee, Wis. Bulletin No. 1085. Paper; 8 × 10½ ins.; pp. 20; illustrated.

This is a revision of a previous bulletin and describes water-wheel type of alternating current generators. These machines are made two or three phase, 25 or 60 cycles, and in sizes of 50 to 5,333 KW. and voltages of 220 to 13,200 volts.

**For other Proposal Advertisements see pages 55, 56, 57, 58, of Advertisements and Construction News page 130.**

## PRELIMINARY FILTERS.

Albany, N. Y.

Sealed proposals will be received by the Board of Contract and Supply, at its office in the City of Albany, N. Y., until 3 P. M., Monday, May 6, 1907, for the Construction of Preliminary Filters.

The work consists of the construction of 16 reinforced concrete filter tanks, each 54 ft. long by 18 ft. wide, with operating gallery, pumping station and appurtenances, according to plans and specifications prepared by the Bureau of Water.

Drawings may be seen, and notice to Contractors, forms of proposal, specifications, contract and bond obtained at the office of the Board of Contract and Supply or at the Bureau of Water, No. 25 Quackenbush Street, Albany, N. Y.

Each proposal must be accompanied by a certified check for Five Thousand Dollars, and the successful bidder will be required to furnish bond to the amount of one-half the amount of the contract for the faithful performance of the work.

The right is reserved to reject any or all bids.

Dated Albany, N. Y., March 28, 1907.

ISIDORE WACHSMAN,
Clerk of the Board.
WALLACE GREENALCH, 14-3t
Engineer and Supt., Bureau of Water.

## FOR SALE.

The Board of Commissioners for the Connecticut River Bridge and Highway District hereby give notice that they offer for sale the buildings and machinery located at No. 175 Commerce Street, in the City of Hartford, now occupied by W. C. Mason & Co., coal dealers. The property hereby offered for sale embraces the coal sheds, pockets and runways, also the engine, boiler and hoisting apparatus, also two set scales, embracing all the buildings on the land formerly belonging to Linderman, Skeer & Co., and occupied for some years past by W. C. Mason & Co., and having a capacity of from 50,000 to 100,000 tons annually.

Said Board of Commissioners will receive sealed bids for said property up to ten o'clock A. M., Monday, April 15th, 1907, when such bids will be opened. The successful bidder must be prepared to pay for said property the price bid immediately upon receiving notice that he is the successful bidder, and further, will be required to remove the buildings and machinery from said property immediately.

Bids may be transmitted to the Connecticut River Bridge and Highway District at their office, No. 650 Main Street, Hartford, Conn., and no bid not received on or before ten o'clock A. M., April 15th, 1907, will be considered.

Said Board of Commissioners will reserve the right to reject any and all bids.

Dated at Hartford, Conn., April 2d, 1907.

MORGAN G. BULKELEY,
President, Board of Commissioners
for the Connecticut River Bridge
14-1t and Highway District.

## PAVING AND DRAINING.

Salisbury, Md.

Sealed proposals will be received by the Mayor and Council of Salisbury, Md., at the City Hall, up to 8 o'clock P. M. of the 29th day of April, 1907, for the grading, paving, curbing and draining of North Division Street, from the North Side of Church Street to the Tracks of the Baltimore, Chesapeake & Atlantic Railway Company. South Division Street, from the South Side of Main Street to the Humphreys Mill Dam. Camden Avenue, from the Wicomico River to Winder Street, and Main Street Extended, from the Wicomio River to Fitzwater Street, in all about 15,000 Square Yards of vitrified fire clay or shale block or Warren Bros. bitulithic pavement, 10,000 feet of reinforced concrete curb, 1,650 feet of 18-inch, 1,400 feet of 15-in., 300 feet of 12-inch drains, with 29 storm water inlets and 12 manholes.

A certified check equal to 5 per cent. of the amount of the bid and drawn payable to the Treasurer of the Town of Salisbury will be required to accompany each proposal. Specifications can be obtained from either the Clerk of the Council or the Consulting Engineer, and plans can be seen at either office.

By order Mayor and Council of Salisbury, Md.

HENRY J. BYRD,
Clerk of Council, Salisbury, Md.
T. CHALKLEY HATTON,
Consulting Engineer,
14-2t Wilmington, Delaware.

MUNICIPAL CIVIL SERVICE COMMISSION,
299 Broadway.
New York, April 2, 1907.

Public notice is hereby given that applications will be received from Tuesday, April 2, 1907, until 4 P. M., Thursday, May 2, 1907, for the position of Assistant Engineer (Designer). The examination will be held on Tuesday, June 4, 1907, at 10 A. M.

Candidates must have had at least five years' experience, part of which should have been in water-work designing and construction. Graduation from a technical school of recognized standing will be accepted as the equivalent of two years' experience.

The examination is open to all citizens of the United States, and the rule requiring that two of the vouchers for candidates residing outside of the City of New York must be residents of the City of New York is waived for this examination.

The minimum salary is $1,800 per annum, and the minimum age is 25 years.

For scope of examination and further information, apply to the Secretary.

FRANK A. SPENCER,
14-4t Secretary.

Department of Public Works,
Bureau of Filtration,
Office, 710 City Hall,
Philadelphia, March 28, 1907.

Sealed proposals, endorsed "Bids for Miscellaneous Work at Torresdale Filter Plant," and addressed to the undersigned, at the office above mentioned, will be received until 12 o'clock, noon, on May 2d, 1907, for Contract No. 103. Completion of Torresdale Pumping Station and Court No. 3 at the Torresdale Filter Plant.

Specification, drawings and blank forms upon which bids must be made can be obtained from the Chief Engineer of the Bureau of Filtration, Room 712, City Hall, to whom all communications should be addressed.

No bid will be considered unless accompanied by a certificate from the City Solicitor that the provisions of an ordinance requiring proposal bonds when the bids exceed in amount five hundred dollars, approved May 25, 1860 (p. 81, West), have been complied with.

The Director reserves to himself the right to reject any or all bids, as he may deem best for the interests of the city.

JOHN R. HATHAWAY,
14-2t 17-1t Director.

FORT DUPONT, DELAWARE CITY, DEL., April 1, 1907.—Sealed proposals, in triplicate, will be received here until 11 a. m., May 1, 1907, for constructing about 2,500 sq. yds. of Macadam Roads and 75 lin. ft. of 10-in. C. I. Culvert at Fort DuPont, Del. Information furnished upon application. U. S. reserves right to accept or reject any or all bids or any part thereof. Envelopes containing bids should be endorsed, "Proposals for Macadam Roads," addressed CAPTAIN J. L. KNOWLTON, Constructing Quartermaster. 14-2t

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., March 29, 1907.—Sealed proposals will be received at this office until 3 o'clok, P. M., on the 2d day of May, 1907, and then opened, for a marble cornice and balustrade at the U. S. Post-office and Custom-house, Burlington, Vermont, in accordance with the drawings and specification, copies of which may be had at this office, or at the office of the Superintendent of Construction, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 14-2t

U. S. ENGINEER'S OFFICE, Wilmington, N. C., April 2, 1907.—Sealed proposals for 20,000 tons, more or less, of rip-rap stone will be received at this office until noon on May 2, 1907, and then publicly opened. Information furnished on application. JOSEPH E. KUHN, Major of Engineers. 14-4t

## PAVING BRICK.

Holyoke, Mass.

Invitation for proposals for Vitrified Paving Bricks or Blocks.

The undersigned Board of Public Works of the City of Holyoke, Mass., will receive at Room No. 2, City Hall, Holyoke, until 1.30 o'clock P. M. of Tuesday, April 16, 1907, sealed proposals for furnishing f. o. b. cars Holyoke, Mass., ten thousand (10,000) or more square yards of the best quality of vitrified paving bricks or blocks, and at the above time and place will publicly open and read the proposals so received.

Full information and bidding blanks may be obtained upon application at the office of said Board.

Each proposal must be accompanied by a certified National bank check payable to the order of the City of Holyoke, in the sum of Five Hundred Dollars ($500.00), or by lawful money of the United States of America in the same sum, in accordance with all provisions of law and the Revised Charter and Ordinances of the City of Holyoke. In presenting a proposal the bidder will estimate the work so that he may comply with all laws of the State and ordinances of the City in the accomplishment of the same. Envelopes containing bids to be addressed to the Chairman, marked "Proposals for Paving Brick," and left at said office before the time hereinbefore specified.

The right to reject any or all bids or to accept any bid that in the opinion of the Board may be for the best interests of the City of Holyoke is hereby reserved.

Board of Public Works.
MICHAEL F. WALSH, Chairman.
GILBERT POTVIN, Jr.
WM. A. CHASE.
Attest:
O. C. FERRY, Asst. Clerk.
Holyoke, Mass., March 29, 1907. 14-1t

OFFICE OF CONSTRUCTING QUARTERMASTER, Fort Morgan, Alabama, March 28, 1907.—Sealed proposals will be received here until 2 P. M., April 17, 1907, for furnishing material and labor for repairing twenty-two buildings at Fort Morgan, Alabama. Information furnished on application. Envelopes containing proposals should be indorsed "Proposals for Repairing Buildings," and addressed to CAPT. LOUIS F. GARRARD, JR., Constructing Quartermaster, U. S. Army, Fort Morgan, Alabama. 14-2t

OFFICE OF THE COMMISSIONERS, D. C., Washington, D. C., March 30, 1907.—Sealed proposals will be received at this office until 12 o'clock M., April 13, 1907, for furnishing underground signal and telephone cable for the Electrical Department of the District of Columbia. Separate bids will be considered for the several items enumerated. Specifications and blank forms of proposals may be obtained at this office. H. B. F. MACFARLAND, HENRY L. WEST, JOHN BIDDLE, Commissioners, D. C. 14-2t

QUARTERMASTER'S OFFICE, West Point, N. Y., April 4, 1907.—Sealed proposals, in duplicate, subject to the usual conditions, will be received at this office until 12 o'clock, noon, April 24, 1907, for plumbing fixtures, pipe and fittings, for new bath and toilet rooms in old cadet barracks at West Point, N. Y. The U. S. reserves the right to accept or reject any or all proposals, or any part thereof. Forms for proposals furnished upon application. Address QUARTERMASTER, West Point, N. Y. 14-3t

## SITUATIONS OPEN

WANTED—Man, experienced in maintenance of way, to take charge of correspondence and manufacturing with company in east making track devices. Address "F. B. 14," Engineering News, New York. 14-2t

WANTED—Several experienced draftsmen and checkers for bridge and structural work. State experience and salary required. Address THE TOLEDO-MASSILLON BRIDGE CO., Toledo, Ohio. 14-tf

## Miscellaneous Wants

WANTED FOR CASH.

**DERRICK SCOW**

with thirty-ton derrick complete. Give full description, lowest price and where same can be inspected. Address "G. B. 14," Engineering News, New York. 14-1t

## FOR SALE

**DREDGE FOR SALE**

New 12-inch Suction Dredge, with 3,250 ft. of spiral riveted steel pipe, pontoons, etc. Address 1110 Park Row Building, New York. 14-2t

FOR SALE

**45-foot Land Pile Driver**

all complete. Immediate shipment. NATIONAL HOISTING ENGINE CO., HARRISON, N. J. 14-4t

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May 4. M
May 20. E
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